

INTERNATIONAL MONETARY FUND

Statistics Department



***Integrated Balance of Payments and International
Investment Position Manual, seventh edition (BPM7)***

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^Ψ Note: This Chapter is concurrently undergoing [Global Consultation](#).

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Note: DRAFT *BPM7* Annexes will undergo Global Consultation and Committee approvals separately.

Chapter 1. Introduction^Ψ

Chapter 1 Introduction

A. Purposes of the *Manual*

1.1 The seventh edition of the *Integrated Balance of Payments and International Investment Position Manual (BPM7, the Manual)* serves as the standard framework for statistics on the positions, transactions, and other changes in financial assets and liabilities between an economy and the rest of the world.

1.2 The main objectives of this *Manual* are as follows:

- (a) To provide and explain concepts, definitions, classifications, and conventions for statistics on the external accounts, i.e., the international investment position (IIP), the balance of payments (BOP), and other changes in financial assets and liabilities;
- (b) To enhance international comparability of data through the promotion of guidelines adopted internationally;
- (c) To show the links of the external accounts to other macroeconomic statistics and promote consistency between different data sets; and
- (d) To provide a brief introduction to uses of data on the external accounts of an economy.
- (e) To provide principles and guidelines to improve the way the external accounts are communicated and disseminated.

1.3 Data collection and other compilation procedures are not generally within the scope of a conceptual manual such as this one. Decisions on such issues should take into

^Ψ **Note:** This Chapter is concurrently undergoing [Global Consultation](#).

account circumstances, such as practical and legal constraints, that need to be judged in each economy and that may explain departures from guidelines. The IMF's *Balance of Payments and International Investment Position Compilation Guide* provides information on these issues.

1.4 The *Manual* provides a framework that is applicable for all economies, from the smallest to the largest economies and from the least developed to the most advanced economies. As a result, it is recognized that some items may not be relevant in all cases (see also paragraphs [1.15-1.16]). It is the responsibility of national compilers to apply international guidelines in a way appropriate to their own circumstances. In implementing this *Manual*, compilers are encouraged to assess the materiality and practicality of particular items according to their own circumstances and are further encouraged to revisit these decisions from time to time to see whether circumstances have changed. Such decisions necessarily rely on the professionalism and expert knowledge of the compilers.

1.5 Factors to take into account when determining the items to be collected and the techniques used include whether or not foreign exchange controls exist, the relative importance of particular types of economic activities, and the diversity of institutions and the range of instruments used in financial markets. In addition, data collection for some items in the framework may be impractical if the item is small and the data collection cost is high. Conversely, compilers may wish to identify other items of particular economic interest in their economy for which additional detail may be required by policymakers and analysts.

1.6 This *Manual* is harmonized with the *System of National Accounts 2025 (2025 SNA)*, which was updated in parallel. Relevant elements of the *Government Finance Statistics Manual 2014* and *Monetary and Financial Statistics Manual and Compilation Guide 2016* will be revised to maintain their harmonization with the two updated manuals. Conceptual interlinkages mean that external accounts compilers should consult with other statisticians to ensure consistent definitions and provide data that can be reconciled where

they overlap. As part of the update of the macroeconomic statistical standards, a common glossary of terms and definitions in macroeconomic statistics has been developed to facilitate harmonization across statistical domains.

1.7 The definitions and classifications in this *Manual* do not purport to give effect to, or interpret, various provisions (which pertain to the legal characterization of official action or inaction in relation to such transactions) of the Articles of Agreement of the International Monetary Fund.

B. Structure of the *Manual*

1.8 The *Manual* has 20 chapters and 14 annexes. The introductory chapters deal with issues that cut across the accounts (Chapters 1–6) and are followed by chapters that cover respectively each main account (Chapters 7–14). The next chapters address topical issues (Chapters 15-18) and analytical use of data (Chapter 19), before the *Manual* closes with a chapter on communication and dissemination of data (Chapter 20). Seven of these chapters have been developed as common chapters with the *2025 SNA*.¹ The *Manual* states general principles that are intended to be applicable in a wide range of circumstances. It also applies the principles to some specific topics that have been identified as needing additional guidance. Definitions are given throughout the text, shown in italics.

1.9 Consistent with this structure, different aspects of a topic are dealt with in different chapters to minimize repetition. For example, the classification of portfolio investment is a cross-cutting issue (Chapter 6), as are valuation and timing issues (Chapter 3). The position, transaction, other changes, and income aspects are dealt with in Chapters 7,

¹The common chapter text is identical across the two standards, but the versions of the common chapters included in the *Manual* contain additional details relevant for the external accounts while the versions included in the *2025 SNA* contain additional details relevant for the national accounts.

8, 9, and 12, respectively. Linkages are emphasized by extensive cross-references. In addition, for trade, direct investment, financial derivatives, reverse transactions, insurance and pensions, and positions and transactions with the IMF, annexes have been included to allow the reader to see the linkages among the different accounts for that topic. A separate annex on sustainable finance in external sector statistics is included to support compilers on the type of data they can provide to users on sustainable finance activities (environment, social, and governance (ESG) and climate change) as well as other data on macroeconomic implications of climate change.

1. Introductory chapters

1.10 The introductory chapters (Chapters 1–6) cover the following:

- (a) Chapter 1 gives background to the *Manual*.
- (b) Chapter 2 covers the accounting and dissemination frameworks.
- (c) Chapter 3 deals with accounting rules (common chapter with the *2025 SNA*).
- (d) Chapters 4 deals with issues associated with residence, institutional units, and sectors (common chapter with the *2025 SNA*).
- (e) Chapter 5 deals with the classifications of financial assets and liabilities.
- (f) Chapter 6 explains the functional categories.

2. Chapters for each account

1.11 Chapters 7–14 deal with the main accounts of the framework. Each account reflects a single economic process or phenomenon and has a single chapter. The order of chapters is a matter of convention; as in the previous edition, in this edition the integrated IIP

appears first to reflect the increased emphasis on its compilation and analysis and to explain financial assets and liability positions before dealing with the investment income they generate.

1.12 Each chapter starts with a statement of general economic principles. A simplified table designed to give an overview of the account is also included in each chapter. The text provides general definitions of items in the account. Specific cases are given as examples of the application of the general definitions and to clear up ambiguities. A full understanding of each account also requires applying the wider principles that apply across several accounts, such as valuation, timing, residence, and classification, as covered in the introductory chapters.

3. Topical chapters

1.13 Chapters 15–18 are new chapters that include in-depth descriptions of statistical issues related to globalization, digitalization, Islamic finance, and informal activities. They are common chapters with the *2025 SNA*.

4. Analysis

1.13 Chapter 19 provides an introduction to the analysis of data, with particular reference to macroeconomic relationships as a whole.

5. Communication and dissemination

1.13a Chapter 20 deals with communication and dissemination of macroeconomic statistics. It is a new chapter that has been developed as a common chapter with the *2025 SNA*.

6. Annexes

1.14 Annexes provide more details on specific issues that go across several accounts, including exceptional financing, debt reorganization, currency unions, remittances, positions and transactions with the IMF, sustainable finance and climate change, data by partner economy, changes from *BPM6*, and a listing of standard components and selected other items.

7. Standard and supplementary items

1.15 A list of standard items for presenting and reporting the external accounts is given in Annex 14. Standard items consist of standard components and memorandum items.

- (a) *Standard components are items that are fully part of the framework and contribute to the totals and balancing items.*
- (b) *Memorandum items are part of the standard presentation, but are not used in deriving totals and balancing items.* For example, whereas nominal value is used for loans in the standard components, memorandum items provide additional information on loans at fair value, as discussed in paragraphs [7.45–7.46].

In addition,

- (c) *Supplementary items are outside the standard presentation, but are compiled depending on circumstances in the particular economy, taking into account the interests of policymakers and analysts as well as resource costs (see the items in italics in Annex 14).*

1.16 The list of standard items should not inhibit compilers from publishing additional data of importance to their economy. IMF requests for information will not be limited to

standard items when further details are required to understand the circumstances of particular economies or to analyze new developments. IMF staff occasionally will consult with authorities to decide on the reporting of additional details. Few economies are likely to have significant information to report for every standard item. Furthermore, data for several components may be available only in combination, or a minor component may be grouped with one that is more significant. The standard items should nevertheless be reported to the IMF as completely and accurately as possible in accordance with the compilation framework.

C. History of the *Manual*

1.17 Each new edition of the *Manual* is introduced in response to economic and financial developments, changes in analytical interests, and accumulation of experience by compilers.

1.18 The IMF showed early interest in statistical methodology with its publication of the first edition of the *Balance of Payments Manual* in January 1948. The major objective of that first *Manual* was to provide a basis for regular, internationally standardized reporting to the IMF. The *Manual* was a continuation of work started by the League of Nations to develop guidelines for BOP statistics. Economists and other specialists from many countries contributed to the *Manual*, and representatives of some 30 countries and international organizations met in Washington, D.C., in September 1947 to finalize the first draft of the *Manual*.

1.19 The first edition of the *Manual* consisted primarily of tables for reporting data and brief instructions for completing them. No general discussion of BOP concepts or compilation methods was included, so it can be said that the *Manual* grew out of the listing of standard components.

1.20 The second edition was published in 1950, greatly expanding the material describing the concepts of the system.

1.21 The third edition was issued in 1961. It moved beyond the previous editions by providing both a basis for reporting to the IMF and a complete set of BOP principles that could be used by countries to serve their own needs.

1.22 The fourth edition was published in 1977. It responded to the important changes in the way in which international transactions were carried out and to changes in the international financial system. Much fuller treatments of the underlying principles of residence, valuation, and other accounting principles were provided. The *Manual* also introduced flexibility in the use of the standard components to construct various balances, with no single presentation preferred.

1.23 The fifth edition was published in 1993 and was marked by harmonization with the *System of National Accounts 1993 (1993 SNA)*. The decision to harmonize the guidelines was a result of increasing interest in linking different macroeconomic data sets and avoiding data inconsistencies. *BPM5* brought about a number of changes in definitions, terminology, and the structure of the accounts, including removing capital transfers and nonproduced nonfinancial assets from the current account to a newly designated capital account, the renaming of the capital account as the financial account, and splitting services from earned income (which previously had been called factor services). Additionally, *BPM5* introduced microfoundations of units and sectors, consistent with the *SNA*, rather than treating the economy as a single unit. In addition, the *Manual* was extended beyond BOP statistics to include the IIP.

1.23a The sixth edition was issued in 2009. While the overall structure of the framework and broad definitions remained mostly unchanged, this edition emphasized the increased importance of balance sheet analysis for understanding international economic

developments, particularly vulnerability and sustainability. It provided considerably more detailed guidance on the IIP and much greater discussion of revaluations and other volume changes and their impact on the values of assets and liabilities. The increased focus on positions was reflected in the amended title as *Balance of Payments and International Investment Position Manual*, with the abbreviation *BPM6* used to highlight the historical evolution from previous editions of the *Manual*, which were known as *BPM4*, *BPM5*, and so on. Additionally, this edition strengthened the focus on themes related to globalization, including goods for processing, merchanting, and migrant workers and their associated remittance flows. It also provided enhanced guidance on new financial arrangements, such as special purpose entities (SPEs), and financial instruments, such as financial derivatives, securitization, index-linked securities, and gold accounts. Another important change was the introduction of the terms *net acquisition of financial assets* and *net incurrence of liabilities* that replaced *credit* and *debit* in the standard presentation of the financial account and thereby inverted the sign of the financial account balance.**1.24** The IMF subsequently published the *Government Financial Statistics Manual 2014* and *Monetary and Financial Statistics Manual and Compilation Guide 2016*. These manuals also brought about further harmonization of the macroeconomic statistical standards, reflecting increasing concerns about the ability to link different statistical data, minimizing data inconsistency, and enhancing analytical potential.

1.25 In 1992, the IMF established the IMF Committee on Balance of Payments Statistics (BOPCOM), as a continuing body for consultation with national compilers and international organizations. A procedure was established for partial revisions of statistical guidelines between major revisions, as was done in the late 1990s for financial derivatives and aspects of direct investment.

1.26 A number of related publications have been developed since the 2009 edition. An updated version of the *Balance of Payments and International Investment Position*

Compilation Guide was published in 2014. The *Guide* complemented *BPM6* by providing practical advice on the collection and compilation of statistics.

1.27 Some aspects of external sector statistics with particular interest were covered in specialized guides. Those guides—most of which were updated following the publication of *BPM6*—are *Coordinated Direct Investment Survey Guide* (2015), *Coordinated Portfolio Investment Survey Guide* (2017), *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template* (2013), *International Merchandise Trade Statistics: Concepts and Definitions* (2010), *Manual on Statistics of International Trade in Services* (2010), *Handbook on Measuring Digital Trade* (2023), *External Debt Statistics: A Guide for Compilers and Users* (2013), *Handbook on Securities Statistics* (2015), *Reporting Guidelines for the BIS International Banking Statistics* (2019), *International Transactions in Remittances: Guide for Compilers and Users* (2009), and the *OECD Benchmark Definition of Foreign Direct Investment* (2008). Relevant elements of these specialized guides will be revised to maintain their harmonization with the updated *Manual*.

D. The 2025 Revision

1.28 At its March 2020 meeting, BOPCOM decided to initiate an update of the *Manual*, targeting publication of the seventh edition in 2025. It was considered that, although the overall framework of the sixth edition did not need to change, a new *Manual* should incorporate the numerous elaborations and clarifications that had been identified since 2009 and address issues identified in the research agenda.

1.29 BOPCOM also decided to conduct the update in parallel with the updates of the 2008 *SNA* and *OECD Benchmark Definition of Foreign Direct Investment, fourth edition*. For the first time, the *Manual* and *SNA* update processes were fully coordinated. As part of this arrangement, joint research groups (task teams) were formed to propose common

recommendations on specific topics included in both the *BPM* and the *SNA* research agendas. BOPCOM and the Advisory Expert Group on National Accounts (AEG) organized several joint meetings to reach agreement on cross-cutting issues, while the *BPM7* and *2025 SNA* editorial teams collaborated and coordinated closely throughout the process. Seven chapters were prepared as common chapters for the seventh edition of the *Manual* and the *2025 SNA*, and a common glossary of terms and definitions in macroeconomic statistics was developed to ensure maximum consistency across statistical domains.

1.30 BOPCOM established task teams to undertake detailed consideration of issues and make recommendations on general principles, the current account, and direct investment. In addition, BOPCOM and the AEG set up joint task teams to deal with issues related to financial and payments systems, globalization, the informal economy, Islamic finance, and communication while AEG task teams on digitalization and wellbeing and sustainability also addressed issues that were relevant to the external accounts. These task teams presented recommendations in Guidance Notes (GNs) on the issues identified in the research agenda. The GNs underwent global consultation prior to being discussed and approved by BOPCOM and the AEG. Draft versions of the chapters and annexes of *BPM7* were posted on the IMF website for global consultation during December 2023 to [October] 2024, with invitations for worldwide comment. In addition, revised versions of chapters and annexes were circulated to BOPCOM members and other key stakeholders for review. A series of regional outreach seminars was conducted between May 2023 and April 2024 to explain the changes in the *Manual* and solicit comments on the content.² This process led to a revised version of the *Manual* submitted

²[A second series of regional outreach seminars focusing on implementation was conducted after the release of the near-final version of the *Manual*.]

to BOPCOM for endorsement in [November 2024]. A near-final version was published in [March 2025] and the final version, including language edits, in [MMM YYYY].

1.31 Four major themes that have emerged from the revision are external sector sustainability; globalization; financial innovation and digitalization; and sustainable finance and climate change.

1.32 The *Manual* addresses the increased need for data to assess **external sector sustainability**. In particular, it acknowledges the need for a detailed understanding of changes in positions to provide a comprehensive picture of external sector sustainability and vulnerability. Therefore, it places the stock/flow reconciliation—also known as the integrated IIP—at the center of *BPM7*, while giving additional importance to the currency breakdowns of both the BOP and IIP. For the first time, other changes in financial assets and liabilities are included in the standard components with a breakdown into other changes in volume, exchange rate changes, and other price changes. [The move to a fully integrated view of transactions, other changes, and positions has been recognized in the amended title as *Integrated Balance of Payments and International Investment Position Manual*.] Additionally, the *Manual* includes supplementary breakdowns of trade by currency to facilitate analyses of how trade flows respond to exchange rate movements. As a new feature, it also includes a standardized statistical definition of net international reserves, which can be used as an indicator of an economy’s external vulnerability.

1.33 Globalization continues to pose challenges to traditional macroeconomic statistics, which are based on the concepts of residence and economic presence. In a world where multinational enterprises (MNEs) operate seamlessly across borders and production is often fragmented in global value chains across borders, there is a need for supplementary presentations to provide alternative views or additional details that complement traditional macroeconomic statistics. Thus, the *Manual* introduces new data series such as separate identification of factoryless goods production and a breakdown of data by domestically and

foreign-controlled corporations. It also includes a harmonized definition of special purpose entities (SPEs) and encourages compilers to identify such entities where their activities are material for their economies.

1.34 Developments in **financial innovation and digitalization** have led to the emergence of new financial instruments and services. An example of financial instruments developed since the latest revision are crypto assets with and without a corresponding liability. Since crypto assets without a corresponding liability do not fit into any existing *BPM6* category of assets, they are treated as nonproduced nonfinancial assets in a separate category within the capital account. The existing standards already allow proper treatment and recording of other emerging financial instruments and services. Still, the *Manual* introduces supplementary “of which” categories for fintech companies within the subsector classification and for fintech-related financial instruments and services when considered relevant. In addition, the *Manual* provides guidance on digital intermediation platforms, cloud computing, nonfungible tokens, and other issues related to digitalization.

1.35 The demand for data related to **sustainable finance and climate change** is growing rapidly. In response, the *Manual* includes a new annex that provides initial ideas on the organization of external sector statistics to support analysis of climate change-related risks as well as sustainable finance activities that contribute to environment and climate-friendly outcomes. Separate identification of ESG/green bonds and loans are included as new supplementary breakdowns (both flows and positions). Moreover, the annex identifies key areas where additional or more granular external accounts data could support policy work on environmental and climate risks (e.g., direct investment by counterparty economy and industrial sector, and international cooperation grants to low-income countries). It also presents some data items that, based on national circumstances, could inspire compilers in the compilation of additional data for assessment of environmental and climate change-related risks.

1.36 The overall structure of the accounts and broad definitions are largely unchanged in this edition. For the changes in this edition, economic and financial developments and evolution of economic policy concerns are taken into account, and clarification and elaboration of these developments are provided. A list of changes made in this edition of the *Manual* is included as Annex 13.

E. Research Agenda

1.43 A research agenda has been identified for possible future work. It includes the following:

[The research agenda will be added at a later stage]

Chapter 2. Overview of the Integrated Framework

Chapter 2 Overview of the Integrated Framework

A. Introduction

2.1 This chapter first describes and illustrates how the external accounts are an integral conceptual part of the broader system of national accounts. It then covers important aspects of statistics such as time series.

B. Structure of the Accounts

References:

2025 SNA, Chapter 3, Overview of the Integrated Framework, and Chapter 19, Summarizing, Integrating and Balancing the Accounts.

1. Overall framework

2.2 The external accounts for an economy summarize the economic relationships between residents of that economy and nonresidents. The external accounts framework is composed of three major interconnected elements: (a) the international investment position (IIP); (b) the balance of payments;¹ and (c) the other changes in financial assets and liabilities accounts.

¹ The abbreviation “BOP” will be used for balance of payments in this chapter and other chapters of *BPM7* (as agreed with the IMF’s Communications Department, responsible for the language editing of *BPM7*).

- (a) the international investment position (IIP) is a statement that shows at a point in time the value of financial assets of residents of an economy that are claims on nonresidents or are gold bullion held as reserve assets and of the liabilities of residents of an economy to nonresidents;
- (b) the balance of payments is a statement that summarizes economic transactions between residents and nonresidents during a specific time period; and
- (c) the other changes in financial assets and liabilities accounts is a statement that shows other flows , that reconciles the balance of payments and IIP for a specific period, by showing changes due to economic events other than transactions between residents and nonresidents (i.e., revaluations and other changes in the volume of assets and liabilities).

The balance of payments' financial account, revaluations, and other changes in volume of financial assets and liabilities account taken together are accumulation accounts (further explained in paragraph 2.20) that explain the changes between the values in the opening and closing positions of the IIP. Taken as a whole, the combination of the opening IIP, accumulation accounts, and the closing IIP is referred to as the integrated IIP (see paragraph 2.10).

2.3 The external accounts provide an integrated framework for the analysis of an economy's international economic relationships, including its international economic performance, exchange rate policy, reserves management, and external vulnerability. A detailed study of the use of external accounts data is provided in

This change will be implemented in the combined version of *BPM7* chapters that will be posted for global consultation.

Chapter 19, Selected Issues in Balance of Payments and International Investment Position Analysis.

2.4 The framework provides a sequence of accounts, each one encompassing a separate economic process or phenomenon, and shows the linkages between them. While each account has a balancing item, the account also gives a full view of its components.

2.5 The concepts of the external accounts are harmonized with the *System of National Accounts (SNA)*, so they can be compared or aggregated with other macroeconomic statistics. The framework for macroeconomic statistics used in the *SNA* and external accounts is shown in Figure 2.1.

2.6 The external accounts framework is the same as the *SNA* framework. However, some accounts, which are shaded in Figure 2.1, are not applicable. Further, in the case of external accounts, the scope of accumulation accounts is limited to the financial account and the other changes in financial assets and liabilities accounts as the IIP relates only to external financial assets and liabilities.²

2.7 The framework is designed so that the core concepts can be used to develop additional data sets, as discussed in Chapter 20, Communicating and Disseminating Economic Statistics.

2. International investment position

2.8 *The IIP is a statistical statement that shows at a point in time the value of financial assets of residents of an economy that are claims on nonresidents or are gold*

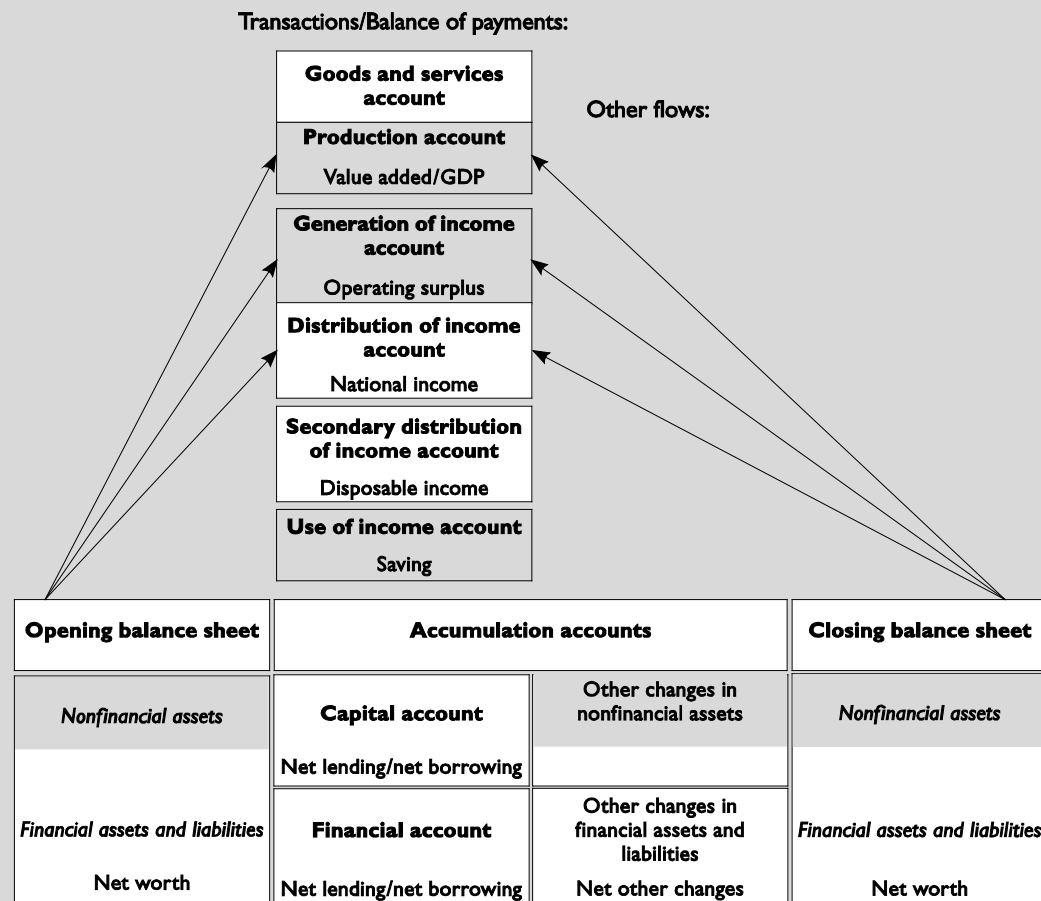
² While the transactions between residents and nonresidents in produced assets are covered in goods and services account and non-produced nonfinancial assets in the capital account, there is no external balance sheet of nonfinancial assets as they are always considered domestic assets (i.e., owned by residents). See paragraph 4.xx, 2025 *SNA* on the asset boundary.

bullion held as reserve assets³ and of the liabilities of residents of an economy to nonresidents. The difference between the assets and liabilities is the net position in the IIP and, **except for the portion of the difference reflecting gold bullion held as reserve assets**, represents either a net claim on or a net liability to the rest of the world.

2.9 The IIP represents a subset of the assets and liabilities included in the national balance sheet. In addition to the IIP, the national balance sheet incorporates nonfinancial assets as well as financial assets and liability positions between residents. This IIP is described further in Chapter 7, Balance Sheet: the International Investment Position.

³ Gold bullion held as reserve asset is the only financial asset without a corresponding liability.

Figure 2.I. Overview of the System of National Accounts as a Framework for Macroeconomic Statistics Including International Accounts



Key:

| |
|------------------------|
| Name of account |
| SNA Balancing item |

Shaded accounts do not appear in the international accounts.
The arrows represent the contributions of assets to production and income generation (e.g., using nonfinancial assets as an input to production, using financial assets to generate interest and dividends).

Shaded accounts do not appear in the external accounts. Further, in the case of external accounts, the financial account and the other changes in financial assets and liabilities accounts are accumulation accounts that explain the changes between the opening and closing IIP (i.e. the capital account is not part of the accumulation accounts in external sector statistics). Other changes in nonfinancial assets/financial assets and liabilities account consists of the revaluations and other changes in the volume of nonfinancial assets/financial assets and liabilities. (this will replace the first footnote to the figure).

2.10 Whereas the IIP relates to a point in time, the integrated IIP statement relates to different points in time, and it has an opening value (as at the beginning of

the period) and a closing value (as at the end of the period). The integrated IIP statement reconciles the opening and closing values of the IIP through the accumulation accounts (i.e., the financial account (flows arising from transactions) and the other changes in financial assets and liabilities account (revaluations and other changes in volume)). So, the values in the IIP at the end of the period result from transactions and other flows in the current and previous periods. A shorter version of Table 7.1 (the integrated IIP statement) is presented in Table 2.1. For further details refer to Chapter 7 (Table 7.1).

| Table 2.1 Integrated International Investment Position Statement | | | | | | | |
|---|--|---|--------------------------------------|------------------------------------|------------------------------------|---|--------------------------------------|
| Beginning of period IIP | Accumulation accounts | | | | | | End of period IIP |
| | Transactions from BOP's financial account | Other changes in financial assets and liabilities accounts | | | | | |
| | | Revaluations | | | Other changes in volume | | |
| | | Total | Exchange rate changes | Other price changes | Total | Of which: debt cancellation write-offs * | |
| Standard components listed in Appendix 14 | | | | | | | |
| * Supplementary items | | | | | | | |

2.11 The highest level of classification used in the IIP, financial account, and other changes in assets and liabilities account is the functional classification, which is covered in Chapter 6. The functional categories group together financial instruments based on economic motivations and patterns of behavior to assist in the analysis of cross-border transactions and positions. These categories are direct investment, portfolio investment, financial derivatives (other than reserves) and employee stock options, other investment, and reserve assets. The *SNA* does not have such

categories, and records financial account activity by type of instrument alone (although direct investment is a memorandum item to the *SNA* instrument classification). Chapter 5 covers the classification of financial instruments.

3. Balance of payments

2.12 The balance of payments is a statistical statement that summarizes transactions between residents and nonresidents during a period. It consists of three main accounts: the current account (which includes the goods and services account, the earned income account, and the transfer income account), the capital account, and the financial account. Under the double-entry accounting system that underlies the balance of payments, each transaction is recorded as consisting of two entries, and the sum of the credit entries and the sum of the debit entries is the same. As indicated in Box 2.1, while credits and debits are used in general to reflect inflows and outflows, the terms credits/revenues and debits/expenditures are used specifically in the current and capital accounts (See Box 2.1 for further elaboration on these terms and double-entry accounting system.)

2.13 The different accounts within the balance of payments are distinguished according to the nature of the economic resources provided and received.

Current account

2.14 The current account shows transactions in goods, services, earned income, and transfer income between residents and nonresidents. The current account is an important grouping of accounts within the balance of payments. Its components are dealt with in the following chapters:

- Chapter 10 discusses the goods account. This account shows transactions in goods.

- Chapter 11 discusses the services account. This account shows transactions in services.
- Chapter 12 discusses the earned income account. This account shows amounts payable and receivable in return for providing temporary use to another entity of labor, financial resources, or nonproduced nonfinancial assets.⁴
- Chapter 13 discusses the transfer income account. This account shows redistribution of income, that is, when resources for current purposes are provided by one party without anything of economic value being supplied as a direct return to that party. Examples include personal transfers and current international assistance.

2.15 The balance on these accounts is known as the current account balance. The current account balance shows the difference between the sum of exports and income receivable and the sum of imports and income payable (exports and imports refer to both goods and services, while income refers to both earned and transfer income). As shown in Chapter 19, Selected Issues in Balance of Payments and International Investment Position Analysis, the value of the current account balance equals the saving-investment gap for the economy. Thus, the current account balance is equally important for understanding domestic transactions.

⁴Allowing another entity to use produced assets gives rise to a service (see paragraph 11.xx). In contrast, allowing another entity to use nonproduced nonfinancial assets gives rise to rent (paragraph 12.xx) and allowing another entity to use financial assets gives rise to investment income, such as interest, dividends, and retained earnings (see paragraph 12.x).

Capital account

2.16 The capital account shows credit and debit entries for nonproduced nonfinancial assets and capital transfers between residents and nonresidents. It records acquisitions and disposals of nonproduced nonfinancial assets, such as land sold to embassies and sales of leases and licenses, crypto assets without a corresponding liability designed as a medium of exchange, as well as capital transfers, that is, the provision of resources for capital purposes by one party without anything of economic value being supplied as a direct return to that party. The capital account balance shows the difference between the sum of disposals of nonproduced nonfinancial assets and capital transfers receivable and the sum of acquisition of nonproduced nonfinancial assets and capital transfers payable. This account is described further in Chapter 14.

Financial account

2.17 The financial account shows net acquisition and disposal of financial assets and liabilities. This account is described in Chapter 8. Financial account transactions appear in the balance of payments and, because of their effect on the stock of assets and liabilities, also in the accumulation accounts of the integrated IIP statement. The financial account balance shows the difference between the net acquisition of financial assets and the net incurrence of liabilities resulting from transactions between residents and nonresidents.

2.18 The sum of the balances on the current and capital accounts represents the net lending (surplus) or net borrowing (deficit) by the economy with the rest of the world. This is conceptually equal to the financial account balance. In other words, the financial account measures how the net lending to or borrowing from nonresidents is financed. The financial account plus the other changes account,



jointly referred to as accumulation accounts (see paragraph 2.20), explain the change in the IIP between beginning- and end-periods.

Box 2.1. Double-Entry Basis of Balance of Payments

Statistics

Recording for individual transactions

The recording of credits and debits underlies the accounting system at the level of individual transactions. Each transaction in the balance of payments is recorded as consisting of two equal and opposite entries, reflecting the inflow and outflow element to each transaction. For each transaction, each party records a matching credit and debit entry:

- Credit (CR.)—exports of goods and services, income receivable, reduction in assets, or increase in liabilities.
- Debit (DR.)—imports of goods and services, income payable, increase in assets, or reduction in liabilities.

Examples

a) A simple example is for sale of goods to a nonresident for 100 in currency. For the resident seller:

Exports 100 (CR.)

Currency 100 (DR.—Increase in financial assets)

(The transaction involves the provision of physical resources to nonresidents and a compensating receipt of financial resources from nonresidents.)

b) An example of a transaction involving only financial asset entries is the sale of shares for 50 in currency. For the resident seller:

Shares and other equity 50 (CR.—Reduction in financial assets)

Currency 50 (DR.—Increase in financial assets) (The selling party provides shares and receives currency in return.)

c) An example involving the exchange of an asset for the creation of a liability is where a borrower receives a loan of 70 in cash. For the resident borrower:

Loan 70 (CR.—Increase in liabilities)

Currency 70 (DR.—Increase in financial assets)

d) An example involving the humanitarian aid (export of goods) of 100. For the exporting economy:

Exports 100 (CR.)

Current transfer 100 (DR.)

(There are some more complex cases when three or more parties are involved, e.g., the case of debt assumption shown in Box 8.1.)

Aggregate recording

In balance of payments aggregates, the current and capital account entries are totals, while financial account entries show for each category/instrument the net transactions in assets and liabilities, respectively (as explained in [paragraph 3.xx](#)). Chapter 3, Flows, Stocks, and Accounting Rules, [Part x](#) provides further information on the accounting system used in balance of payments statistics.

As a result of the two-entry nature of each transaction, the difference between the sum of credit entries and the sum of debit entries is conceptually zero in the national balance of payments of a country, that is, in concept, the accounts as a whole are in balance. As discussed in paragraphs 2.24–2.26, measurement problems cause discrepancies in practice.

The two-entry nature of the balance of payments can be presented in aggregate data in different ways. A presentation where the nature of the entries is conveyed by the column headings (namely, credits/revenues, debits/expenditures, net acquisition of financial assets, and net incurrence of liabilities) is adopted in Table 2.2. This presentation is considered to be easily understood by users. Another presentation is where credit entries are shown as positive and debit entries as negative. This presentation is useful for calculating balances, but requires more explanation for users (e.g., increases in assets are shown as a negative value).

In the *SNA* presentation, a credit/revenue for the compiling economy in the balance of payments current account is called “expenditure” by the rest of the world sector (e.g., exports result in expenditure for the rest of the world). Similarly, a debit/expenditure for the compiling economy in the balance of payments’ current account is called “revenues” in the *SNA* (e.g., imports are a revenue provided by the rest of the world). Because the *SNA* rest of the world accounts use the point of view of the nonresidents, assets of the compiling economy in the external accounts are shown as liabilities of the rest of the world sector in the *SNA*.

Gross and net recording

2.19 The current and capital accounts show transactions in gross terms. In contrast, the financial account shows transactions in net terms, which are shown separately for financial assets and liabilities (i.e., net transactions in financial assets shows the acquisition of assets less the reduction in the relevant assets, not assets net of liabilities; and net transactions in liabilities shows the incurrence of liabilities less the reduction in the relevant liabilities). For resources that enter and leave an economy (such as re-exported goods, and funds in transit), it may be analytically useful to present net flows as well. Each of the accounts and the borderlines between them are discussed in more detail in the specific chapters.

4. Accumulation accounts

1.2.19-1 As shown in Figure 2.1, in the SNA framework, accumulation accounts are those that record flows that effect the entries in the balance sheets at the start and end of the accounting period. There are four accumulation accounts—the capital account, the financial account, the revaluation account and the other change in the volume of assets and liabilities account (paragraph 1.xx, 2025 SNA).

2.20 In contrast, for external accounts as shown in Table 2.1, accumulation accounts explain the changes between opening and closing IIP (external balance sheet) and *only comprise the balance of payments' financial account, and other changes in financial assets and liabilities accounts*. They show the accumulation (i.e., acquisition and disposal) of financial assets and liabilities through transactions and other changes that affect them. Accordingly, they explain changes between the opening and closing IIP. Whereas the current account is concerned with resource flows oriented to the current period, the accumulation accounts deal with the provision and financing of assets and liabilities, which are items that will affect future periods.

2.21 The financial account shows the net acquisition of financial assets and net incurrence of liabilities during the specified period. In contrast, the other changes in financial assets and liabilities account shows flows that do not result from balance of payments transactions. The other changes in financial assets and liabilities account covers revaluations due to exchange rate changes and other price changes and other changes in volume (e.g., write-offs and cancellations, reclassifications). This account is described further in Chapter 9.

5. Integrated recording of positions and transactions

2.22 As highlighted in the previous sections, the external accounts, inclusive of the IIP, balance of payments, and the other changes in financial assets and liabilities accounts consist of a set of accounts that are integrated at two levels. First, while the accounts represent a great mass of detailed information on interaction between the different economic agents, their recording is based on the double-entry system of accounting, as set out in Box 2.1.

2.23 Second, the system calls for consistent reporting by the resident and the nonresident parties to each financial claim, transaction, and other flow. This consistency helps to promote comparability across economies as well as the use of counterpart data as data sources or for data validation.

6. Statistical discrepancy

2.24 Although the balance of payments accounts are, in principle, balanced, imbalances result in practice from imperfections in source data and compilation. This imbalance, a usual feature of balance of payments data, is labeled statistical discrepancy and should be identified separately in published data. It should not be

included indistinguishably in other items. In the balance of payments, it is used to show the difference between net lending/net borrowing derived from the financial account and net lending/net borrowing from the current and capital accounts.⁵

Therefore, a positive statistical discrepancy indicates an overall tendency that:

- (a) the value of credits/revenues in the current and capital accounts is too low; and/or
- (b) the value of debits/expenditures in the current and capital accounts is too high; and/or
- (c) the value of net acquisition of assets in the financial account is too high; and/or
- (d) the value of net incurrence of liabilities in the financial account is too low.

(For a negative statistical discrepancy, these tendencies are reversed.)

2.25 The statistical discrepancy should be analyzed by compilers. The size and trends may help identify data problems, such as coverage or misreporting. Patterns in statistical discrepancy may provide useful information on data problems. For example, a consistent sign indicates a bias in one or more components. A persistent positive statistical discrepancy suggests that credit entries have been understated or omitted or debit entries have been overstated. In contrast, a volatile pattern may suggest timing problems. However, although statistical discrepancy can help point to some problems, it is an incomplete measure because discrepancies in opposite directions offset each other. The term statistical discrepancy should not be interpreted as meaning errors on the part of compilers; it is far more common that

⁵For example, if net lending/net borrowing measured from the current and capital accounts is 29, while net lending/net borrowing measured from the financial account is 31, then statistical discrepancy is +2.

this discrepancy is caused by other factors, such as incomplete data sources and poor-quality reporting.

2.26 A large or volatile statistical discrepancy hampers interpretation of the balance of payments statistics. While it is not possible to give guidelines on an acceptable size of statistical discrepancy, it can be assessed (where possible) by compilers in relation to other items, such as GDP, positions data, and gross flows. Statistical discrepancies also can arise in the IIP statement. Closing values are by definition equal to the opening values plus net transactions plus net other changes during the period. However, if these components are independently measured, discrepancies may arise because of data imperfections.

7. Linkages within the external accounts

2.27 Some of the important linkages within the external accounts are as follows:

- (a) The end of period values of the IIP are the sum of the beginning of period values of the IIP, balance of payments financial account transactions, and other changes in financial assets and liabilities.
- (b) The current, capital, and financial account entries are jointly in balance, in principle.
- (c) Consequent to (b), the balance on the sum of the current and capital accounts is equal to the balance on the financial account. This balance is called net lending/net borrowing, whichever way it is derived.
- (d) Consequent to (b), the current account balance is equal to the financial account balance less the capital account balance.

- (e) Financial assets and liabilities generally give rise to investment income. Table 5.2 shows the link between financial instruments and their corresponding income. The income rate of return is derived as the ratio of income to the corresponding stock of assets or liabilities. (Rates of return might also take into account holding gains or losses for some analysis.)

2.28 Because of the harmonization of macroeconomic statistical guidelines, it is also possible to look at residents' transactions and positions with nonresidents in relation to the transactions and positions between residents. For example:

- (a) the external financing can be compared with domestic lending and borrowing;
and
- (b) the IIP can be compared with the national balance sheet and with monetary and financial statistics.

Chapter 19, Selected Issues in Balance of Payments and International Investment Position Analysis, has a wider discussion of interrelationships between the external accounts and other macroeconomic data.

8. Linkages and consistency with other macroeconomic data sets

2.29 Placing the external accounts in the *SNA* framework shown in Figure 2.1 helps identify linkages among macroeconomic data sets. Specific aspects of the external accounts are provided, for instance, in reporting statements on merchandise trade, international trade in services, direct investment, external debt, and international reserves. Additionally, items involving flows and positions between residents and nonresidents that appear in the national accounts,

monetary and financial statistics, and government finance statistics correspond exactly to external accounts items.

2.30 The following paragraphs list data items that should be consistent with the external accounts. Data compilers should reconcile these overlapping items, with a view toward eliminating or explaining any differences. Data consistency is particularly important for comprehensive macroeconomic analysis, in order to allow the different datasets to be combined coherently. For example, if data are consistent, it is possible to understand how a government is financing a deficit from external and domestic sources, or show how the saving-investment balances of individual sectors contribute to the national current account balance.

National accounts

2.31 The external accounts correspond to the rest of the world accounts of the *SNA*. They differ in that the balance of payments is from the perspective of the resident sectors, whereas national accounts data for the rest of the world are from the perspective of nonresidents. The *SNA* items that are equivalent to balance of payments items include i) exports and imports of goods and services; and ii) earned income, transfer income, current external balance, balance on the capital account, and net lending/net borrowing of the rest of the world account.

Another important difference between the national accounts and the external accounts is the difference in the presentation of financial account and balance sheet. While national accounts use the instrument classification, balance of payments financial account and IIP are presented by functional categories. Table 2.4 provides further details on the link between instrument and functional categories.

Monetary and financial statistics

2.32 Balance sheets for deposit-taking and other financial corporations can be compared with the relevant parts of the IIP. In particular:

- foreign assets and liabilities of the central bank; and
- foreign assets and liabilities of other deposit-taking corporations

should be consistent with the corresponding external accounts items. Because the IIP data are organized primarily on a functional category basis, the instrument and sector data from different functional categories need to be combined if they are to be linked with monetary and financial statistics. Other adjustments may be needed for any deposit-taking corporations whose liabilities are excluded from broad money (e.g., offshore banks in some cases) or for other types of corporations included in broad money (such as money market funds) and thus are included with the deposit-taking corporations subsector in monetary statistics.

2.33 In cases in which monetary statistics also include flows, they can be compared with the balance of payments. Balance of payments transactions for a period may differ from the transactions in foreign assets and liabilities in the monetary statistics to the extent that balance of payments statistics exclude transactions in foreign assets and liabilities between residents. See also paragraphs 19.xx-19.xx on the possibility of linking these transactions through the monetary presentation of the balance of payments.

Government finance statistics

2.34 The following items that appear in government finance statistics should be consistent with their external accounts equivalents:

- interest payable on general government external debt;

- interest or dividends receivable on general government holdings of external assets;
- grants or other transfers by general government to nonresidents;
- grants or other transfers to general government from nonresidents;
- net external financing; and
- external assets and liabilities.

External debt statistics

2.34-1 The following items that appear in external debt statistics (EDS) should be consistent with the relevant items in IIP liabilities. While in the IIP, positions of financial assets and liabilities are in general valued at market value on the balance sheet reporting date (except for the nonnegotiable instruments such as loans, deposits, and other accounts receivable/payable which are valued at nominal value), the EDS Guide recommends that the debt instruments be valued at nominal value and for debt securities at market value as well. Therefore, the gross external debt position (with debt securities valued at market value) equals the debt liabilities in the IIP statement, i.e., the gross external debt position equals total IIP liabilities excluding all equity (equity shares and other equity) and investment fund shares and financial derivatives and employee stock options (ESOs). For additional details on the linkages between external debt statistics and IIP refer to Appendix 4, *EDS Guide 2013* and Annex 12 of *BPM7*.

Table 2.2 Corresponding items between EDS and IIP

| | |
|---------------------------|--|
| External Debt Statistics | IIP Liabilities |
| DI: Intercompany lending | Direct investment—debt instruments |
| Debt securities | Portfolio investment—debt securities |
| Currency and deposits | Other investment—currency and deposits |
| Loans | Other investment--loans |
| Trade credit and advances | Other investments—trade credit and advances |
| Other debt liabilities | Other investments—insurance, pension, and standardized guarantee schemes |
| Other debt liabilities | Other investments—other accounts payable-other |
| SDR allocations | Other investment—SDR allocations |

9. Numerical example

2.35 Table 2.3 provides a numerical overview of the external accounts, using data drawn from the *SNA* framework presented in Annex 2.1. (The numerical example helps show interrelationships between items.)

2.36 The external accounts data have the same scope as the rest of the world sector in the *SNA*. However, the external accounts are expressed from the perspective of the resident units, but in the *SNA*, the data for the rest of world sector are expressed from the perspective of the nonresident units. So, the current account balance of 13 in Table 2.3 is presented as a current external balance for the rest of the world sector of –13 in the table in Annex 2.1. Similarly, closing assets of 1,346 in the IIP are shown as the liabilities of 1,346 of the rest of the world sector in the *SNA*.

| Table 2.3. Overview of External Accounts | | | |
|--|-------------------------|----------------------------|----------------|
| <i>(Consistent with Data in Annex 2.1)¹</i> | | | |
| Balance of payments | Credits/revenues | Debits/expenditures | Balance |
| Current account | | | |
| Goods and services | 540 | 499 | 41 |
| Goods | 462 | 392 | 70 |
| Services | 78 | 107 | -29 |
| Earned income | 50 | 40 | 10 |
| Remuneration of employees | 6 | 2 | |
| Interest | 13 | 21 | |
| Distributed income of corporations | 17 | 17 | |
| Reinvested earnings | 14 | 0 | |
| Rent | 0 | 0 | |
| Transfer income | 17 | 55 | -38 |
| Current taxes on income, wealth, etc. | 1 | 0 | |
| Net nonlife insurance premiums | 2 | 11 | |
| Nonlife insurance claims | 12 | 3 | |
| Current international cooperation | 1 | 31 | |
| Miscellaneous current transfers | 1 | 10 | |

| | | | |
|--|--|--------------------------------------|----------------|
| Adjustment for change in pension entitlements | | | |
| Current account balance | | | 13 |
| Capital account | | | |
| Acquisitions/disposals of nonproduced nonfinancial assets | 0 | 0 | |
| Capital transfers | 1 | 4 | |
| Capital account balance | | | -3 |
| Net lending (+)/net borrowing (-) (from current and capital accounts) | | | 10 |
| Financial account (by functional category) | Net acquisition of financial assets | Net incurrence of liabilities | Balance |
| Direct investment | 8 | 11 | |
| Portfolio investment | 18 | 14 | |
| Financial derivatives (other than reserves) and ESOs | 3 | 0 | |
| Other investment | 20 | 22 | |
| Reserve assets | 8 | | |
| Total changes in assets/liabilities | 57 | 47 | |
| Net lending (+)/net borrowing (-) (from financial account) | | | 10 |
| Statistical discrepancy | | | 0 |

| International investment position: | Opening position | Accumulation Accounts | | | | Closing position |
|--|------------------|--------------------------|--|-------------------------|--|------------------|
| | | Transactions (fin. acc.) | Other changes in financial assets and liabilities accounts | | | |
| | | | Revaluations | Other changes in volume | | |
| Assets (by functional category) | | | | | | |
| Direct investment | 78 | 8 | 1 | 0 | | 87 |
| Portfolio investment | 190 | 18 | 2 | 0 | | 210 |
| Financial derivatives (other than reserves) and ESOs | 7 | 3 | 0 | 0 | | 10 |
| Other investment | 166 | 20 | 0 | 0 | | 186 |
| Reserve assets | 833 | 8 | 12 | 0 | | 853 |
| Total assets | 1,274 | 57 | 15 | 0 | | 1,346 |
| Liabilities (by functional category) | | | | | | |
| Direct investment | 210 | 11 | 2 | 0 | | 223 |
| Portfolio investment | 300 | 14 | 5 | 0 | | 319 |

| | | | | | |
|---|------------|-----------|----------|----------|------------|
| Financial derivatives (other than reserves) and ESOs | 0 | 0 | 0 | 0 | 0 |
| Other investment | 295 | 22 | 0 | 0 | 317 |
| Total liabilities | 805 | 47 | 7 | 0 | 859 |
| Net IIP | 469 | 10 | 8 | 0 | 487 |
| <p>Note: ESO = employee stock option.</p> <p>¹The SNA tables in Annex 2.1 use instruments rather than functional categories. At the end of Annex 2.1, external accounts data are presented in terms of instruments and the derivation of functional category data from instrument data is shown.</p> | | | | | |

Box 2.2. Data Quality Assessment Framework

This table shows the two-digit level of the IMF's data quality assessment framework, based on 2012 version of DQAF for Balance of Payments and International Investment Position. More detail of the framework on the specific aspects for balance of payments is available on the IMF website. New versions will be posted on the IMF website as they are developed.

| Quality dimensions | Elements |
|--|---|
| 0. Prerequisites of quality | 0.1 Legal and institutional environment—The environment is supportive of statistics. 0.2 Resources—Resources are commensurate with needs of statistical programs. 0.3 Relevance—Statistics cover relevant information on the subject field. 0.4 Other quality management—Quality is a cornerstone of statistical work. |
| 1. Assurances of integrity <i>The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.</i> | 1.1 Institutional integrity—Statistical policies and practices are guided by professional principles. 1.2 Transparency—Statistical policies and practices are transparent. 1.3 Ethical standards—Policies and practices are guided by ethical standards. |
| 2. Methodological soundness <i>The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.</i> | 2.1 Concepts and definitions—Concepts and definitions used are in accord with internationally accepted statistical frameworks. 2.2 Scope—The scope is in accord with internationally accepted standards, guidelines, or good practices. 2.3 Classification/sectorizations—Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices. |

| | |
|---|---|
| <p>3. Accuracy and reliability <i>Source data and statistical techniques are sound and statistical outputs sufficiently portray reality.</i></p> | <p>2.4 Basis for recording—Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices.</p> <p>3.1 Source data—Source data available provide an adequate basis to compile statistics.</p> <p>3.2 Assessment of source data—Source data are regularly assessed.</p> <p>3.3 Statistical techniques—Statistical techniques employed conform to sound statistical procedures.</p> <p>3.4 Assessment and validation of intermediate data and statistical outputs—Inter-mediate results and statistical outputs are regularly assessed and validated.</p> <p>3.5 Revision studies—Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.</p> |
| <p>4. Serviceability Statistics, <i>with adequate periodicity and timeliness, are consistent and follow a predictable revisions policy.</i></p> | <p>4.1 Periodicity and timeliness—Periodicity and timeliness follow internationally accepted dissemination standards.</p> <p>4.2 Consistency—Statistics are consistent within the data set, over time, and with major data sets.</p> <p>4.3 Revision policy and practice—Data revisions follow a regular and publicized procedure.</p> |
| <p>5. Accessibility Data and metadata are easily available and assistance to users is adequate.</p> | <p>5.1 Data accessibility—Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.</p> <p>5.2 Metadata accessibility—Up-to-date and pertinent metadata are made available.</p> <p>5.3 Assistance to users—Prompt and knowledgeable support service is available.</p> |

C. Metadata, Dissemination Standards, Data Quality, and Time Series

References:

IMF, *Dissemination Standards Bulletin Board* at www.imf.org.

IMF, *The Enhanced General Data Dissemination System: Guide for Participants and Users*.

IMF, *Special Data Dissemination Standard*.

IMF, *Special Data Dissemination Standard Plus*.

1. Metadata, dissemination standards, and data quality

2.37 Metadata are systematic, descriptive information about data content and organization. They provide information on the concepts, sources, and methods underlying the data and therefore help users to understand and assess the characteristics of the data. Statistical compilers should provide metadata to their users because metadata are an integral part of the publication of statistics.

2.38 Good dissemination practices are essential in addition to good data compilation. As well as provision of metadata, aspects of good dissemination practices include predictable release schedule, availability of publications, and identification of internal government access to statistics before public release. In recent years, international guidelines have been developed on good data dissemination practices, namely, the IMF's Enhanced General Data Dissemination System, Special Data Dissemination Standard, and Special Data Dissemination Standard Plus.

2.39 The IMF's Data Quality Assessment Framework identifies aspects of data quality, including the definitions and sources of data as well as the dissemination and institutional aspects. Box 2.2 shows the broadest headings of the framework. In addition, Chapter 20, Section VII discusses the *Framework for Measuring Alignment with Economic Accounting Statistical Standards* and refers to the IMF's DQAF.

2. Time series

Reference:

IMF, *Quarterly National Accounts Manual, 2017 Edition*, Chapter 7, Seasonal Adjustment, and Chapter 12, Revisions.

2.40 While the tables included in the *Manual* have been designed to highlight classifications and interrelationships, tabulations for users will generally use time series. Good practices in the compilation of external accounts for time series analysis include the following:

- (a) Consistency over time in concepts and compilation practices to minimize “breaks” and “steps” in the series—where changes in definitions and techniques are implemented, they should be clearly identified to data users and the effect should be quantified, where practical, preferably with an overlapping period;
- (b) A transparent way of handling of revisions—revisions to data are necessary to account for revised methods and more recent information. The revision of data should be dealt with through a predictable and documented policy. The causes and sizes of significant individual revisions should be identified. Revision studies should be made to identify the size and any bias of past

revisions. This will help to refine preliminary data and to define the optimum revision cycle that is largely driven by the availability of major data sources; and

- (c) Consistency of available annual, quarterly, and monthly data—the monthly values should sum to the corresponding quarterly values, which should sum to the corresponding annual values.

2.41 Seasonal adjustment of monthly and quarterly data is potentially useful for time series data in both analysis and compilation. However, some external accounts items, especially in the financial account, may not be suitable for seasonal adjustment because of the high degree of irregularity associated with large, one-time transactions. Refer to Chapter 7, *Quarterly National Accounts Manual* for the main principles of seasonal adjustment procedures.

(included in Chapter 20)

Annex 2.1

Overview of Integrated Economic Accounts

Table 2.4. Overview of Integrated Economic Accounts (from 2025 SNA)

| Table 2.4. Overview of Integrated Economic Accounts (from 2025 SNA) | | | | | | | | | |
|---|---------------------------|------------------------|--------------------|-------------|--------|---------------|-------------------|--------------------|-------|
| Production account | | | | | | | | | |
| Uses | | | | | | | | | |
| Transactions and balancing items | Nonfinancial corporations | Financial corporations | General government | House holds | NPISHs | Total economy | Rest of the world | Goods and services | Total |
| Imports of goods and services | | | | | | | | 499 | 499 |
| Imports of goods | | | | | | | | 392 | 392 |
| Imports of services | | | | | | | | 107 | 107 |
| Exports of goods and services | | | | | | | 540 | | 540 |
| Exports of goods | | | | | | | 462 | | 462 |
| Exports of services | | | | | | | 78 | | 78 |
| Output | | | | | | | | 3,604 | 3,604 |
| Intermediate consumption | 1,477 | 52 | 222 | 115 | 17 | 1,883 | | | 1,883 |
| Taxes on products | | | | | | | | 141 | 141 |
| Subsidies on products (–) | | | | | | | | –8 | –8 |

| | | | | | | | |
|--|-------|----|-----|-----|----|-------|-------|
| Value added, gross/Gross domestic product | 1,331 | 94 | 126 | 155 | 15 | 1,854 | 1,854 |
| Consumption of fixed capital | 157 | 12 | 27 | 23 | 3 | 222 | 222 |
| <i>Value added, net/Net domestic product</i> | 1,174 | 82 | 99 | 132 | 12 | 1,632 | 1,632 |
| Generation of income account | | | | | | | |
| Uses | | | | | | | |
| Compensation of employees | 986 | 44 | 98 | 11 | 11 | 1,150 | 1,150 |
| Wages and salaries | 841 | 29 | 63 | 11 | 6 | 950 | 950 |
| Employers' social contributions | 145 | 15 | 35 | 0 | 5 | 200 | 200 |
| Taxes on production and imports | | | | | | 235 | 235 |
| Taxes on products | | | | | | 141 | 141 |
| Other taxes on production | 88 | 4 | 1 | 0 | 1 | 94 | 94 |
| Subsidies | | | | | | -44 | -44 |
| Subsidies on products | | | | | | -8 | -8 |

| | | | | | | | | |
|---|-----|-----|----|----|---|-----|----|-----|
| Other subsidies on production | -35 | 0 | 0 | -1 | 0 | -36 | | -36 |
| <i>Operating surplus, net</i> | 135 | 34 | 0 | 69 | 0 | 238 | | 238 |
| <i>Mixed income, net</i> | | | | 53 | | 53 | | 53 |
| Allocation of primary income account | | | | | | | | |
| Uses | | | | | | | | |
| Compensation of employees | | | | | | 6 | | 6 |
| Wages and salaries | | | | | | 6 | | 6 |
| Employers' social contributions | | | | | | 0 | | 0 |
| Taxes on production and imports | | | | | | | | 0 |
| Taxes on products | | | | | | | | 0 |
| Other taxes on production | | | | | | | | 0 |
| Subsidies | | | | | | | | 0 |
| Subsidies on products | | | | | | | | 0 |
| Other subsidies on production | | | | | | | | 0 |
| Property income | 134 | 168 | 42 | 41 | 6 | 391 | 44 | 435 |

| | | | | | | | | |
|---|----|-----|-----|-------|---|-------|----|-------|
| Interest | 56 | 106 | 35 | 14 | 6 | 217 | 13 | 230 |
| Distributed income of corporations | 47 | 15 | | | | 62 | 17 | 79 |
| Reinvested earnings on foreign direct investment | 0 | 0 | | | | 0 | 14 | 14 |
| Other investment income | | 47 | | | | 47 | 0 | 47 |
| Rent | 31 | 0 | 7 | 27 | 0 | 65 | | 65 |
| Balance of primary income, net/ National income, net | 97 | 15 | 171 | 1,358 | 1 | 1,642 | | 1,642 |

| Production account | | | | | | | | | Resources |
|-------------------------------------|------------------------------|---------------------------|-----------------------|------------|--------|------------------|----------------------|--------------------------|-----------|
| Transactions and balancing items | Nonfinancial corporations | Financial corporations | General government | Households | NPISHs | Total economy | Rest of the world | Goods and services | Total |
| Imports of goods and services | | | | | | | 499 | | 499 |
| Imports of goods | | | | | | | 392 | | 392 |
| Imports of services | | | | | | | 107 | | 107 |
| Exports of goods and services | | | | | | | | 540 | 540 |
| Exports of goods | | | | | | | | 462 | 462 |
| Exports of services | | | | | | | | 78 | 78 |
| Output | 2,808 | 146 | 348 | 270 | 32 | 3,604 | | | 3,604 |
| Intermediate consumption | | | | | | | | 1,883 | 1,883 |
| Taxes on products | | | | | | 141 | | | 141 |
| Subsidies on products (-) | | | | | | -8 | | | -8 |

| | | | | | | | | |
|--|-------|----|----|-----|----|-------|--|------------------|
| Generation of income account | | | | | | | | Resources |
| <i>Value added, net/Net domestic product</i> | 1,174 | 82 | 99 | 132 | 12 | 1,632 | | 1,632 |
| Compensation of employees | | | | | | | | |
| Wages and salaries | | | | | | | | |
| Employers' social contributions | | | | | | | | |
| Taxes on production and imports | | | | | | | | |
| Taxes on products | | | | | | | | |
| Other taxes on production | | | | | | | | |
| Subsidies | | | | | | | | |
| Subsidies on products | | | | | | | | |
| Other subsidies on production | | | | | | | | |
| Allocation of primary income account | | | | | | | | Resources |
| Operating surplus, net | 135 | 34 | 0 | 69 | 0 | 238 | | 238 |

| | | | | | | | | |
|---|------------|------------|-----------|--------------|----------|--------------|-----------|--------------|
| Mixed income, net | | | | 53 | | 53 | | 53 |
| Compensation of employees | | | | 1,154 | | 1,154 | 2 | 1,156 |
| Wages and salaries | | | | 954 | | 954 | 2 | 956 |
| Employers' social contributions | | | | 200 | | 200 | 0 | 200 |
| Taxes on production and imports | 235 | | | | | 235 | | 235 |
| Taxes on products | | 141 | | | | 141 | | 141 |
| Other taxes on production | | 94 | | | | 94 | | 94 |
| Subsidies | | -44 | | | | -44 | | -44 |
| Subsidies on products | | -8 | | | | -8 | | -8 |
| Other subsidies on production | | -36 | | | | -36 | | -36 |
| Property income | 96 | 149 | 22 | 123 | 7 | 397 | 38 | 435 |
| Interest | 33 | 106 | 14 | 49 | 7 | 209 | 21 | 230 |
| Distributed income of corporations | 10 | 25 | 7 | 20 | 0 | 62 | 17 | 79 |

**Reinvested earnings on
foreign**

| | | | | | | | | |
|------------------------------------|-----------|----------|----------|-----------|----------|-----------|----------|-----------|
| direct investment | 4 | 7 | 0 | 3 | 0 | 14 | 0 | 14 |
| Other investment income | 8 | 8 | 1 | 30 | 0 | 47 | 0 | 47 |
| Rent | 41 | 3 | 0 | 21 | 0 | 65 | | 65 |

| Secondary distribution of income account | | | | | | | | | |
|--|----------------------------------|-------------------------------|---------------------------|-------------------|---------------|----------------------|--------------------------|---------------------------|--------------|
| Uses | | | | | | | | | |
| Transactions and balancing items | Nonfinancial corporations | Financial corporations | General government | Households | NPISHs | Total economy | Rest of the world | Goods and services | Total |
| Current transfers | 98 | 277 | 248 | 582 | 7 | 1,212 | 17 | | 1,229 |
| Current taxes on income, wealth, etc. | 24 | 10 | 0 | 178 | 0 | 212 | 1 | | 213 |
| Net social contributions | | | | 333 | | 333 | 0 | | 333 |
| Social benefits other than social transfers in kind | 62 | 205 | 112 | 0 | 5 | 384 | 0 | | 384 |
| Other current transfers | 12 | 62 | 136 | 71 | 2 | 283 | 16 | | 299 |
| Disposable income, net | 71 | 13 | 290 | 1,196 | 34 | 1,604 | | | 1,604 |
| Use of disposable income account | | | | | | | | | |
| Uses | | | | | | | | | |

| | | | | | | | | |
|--|-------------|------------|------------|--------------|-----------|--------------|------------|--------------|
| Final consumption expenditure | | | 352 | 1,015 | 32 | 1,399 | | 1,399 |
| Adjustment for the change in pension entitlements | 0 | 11 | 0 | | 0 | 11 | 0 | 11 |
| <i>Current external balance</i> | | | | | | | -13 | -13 |
| Capital account | | | | | | | | |
| Changes in assets | | | | | | | | |
| Gross capital formation | 308 | 8 | 38 | 55 | 5 | 414 | | 414 |
| Consumption of fixed capital | -157 | -12 | -27 | -23 | -3 | -222 | | -222 |
| Changes in inventories | 26 | 0 | 0 | 2 | 0 | 28 | | 28 |
| Acquisitions less disposals of valuables | 2 | 0 | 3 | 5 | 0 | 10 | | 10 |
| Acquisitions less disposals of nonproduced assets | -7 | 0 | 2 | 4 | 1 | 0 | | 0 |
| Capital transfers, receivable | | | | | | | | |

| | | | | | | | | |
|--|------------|------------|-------------|------------|-----------|------------|------------|------------|
| Capital transfers, payable | | | | | | | | |
| <i>Net lending (+) / net borrowing (-)</i> | -56 | -1 | -103 | 174 | -4 | 10 | -10 | 0 |
| Financial account | | | | | | | | |
| Changes in assets | | | | | | | | |
| Net acquisition of financial assets | 83 | 172 | -10 | 189 | 2 | 436 | 47 | 483 |
| Monetary gold and SDRs | | -1 | | | | -1 | 1 | 0 |
| Monetary gold | | 0 | | | | 0 | 0 | 0 |
| SDRs | | -1 | | | | -1 | 1 | 0 |
| Currency and deposits | 39 | 10 | -26 | 64 | 2 | 89 | 11 | 100 |
| Debt securities | 7 | 66 | 4 | 10 | -1 | 86 | 9 | 95 |
| Loans | 19 | 53 | 3 | 3 | 0 | 78 | 4 | 82 |
| Equity and investment fund shares | 10 | 28 | 3 | 66 | 0 | 107 | 12 | 119 |

| | | | | | | | | |
|---|----------|----------|----------|-----------|----------|-----------|-----------|-----------|
| Insurance, pension, and standardized guarantee schemes | 1 | 7 | 1 | 39 | 0 | 48 | 0 | 48 |
| Financial derivatives and employee stock options | 3 | 8 | 0 | 3 | 0 | 14 | 0 | 14 |
| Other accounts receivable/payable | 4 | 1 | 5 | 4 | 1 | 15 | 10 | 25 |

| Secondary distribution of income account | | | | | | | | | Resources |
|--|---------------------------|------------------------|--------------------|------------|--------|---------------|-------------------|--------------------|-----------|
| Transactions and balancing items | Nonfinancial corporations | Financial corporations | General government | Households | NPISHs | Total economy | Rest of the world | Goods and services | Total |
| <i>Balance of primary income, net/National income, net</i> | 97 | 15 | 171 | 1,358 | 1 | 1,642 | | | 1,642 |
| Current transfers | 72 | 275 | 367 | 420 | 40 | 1,174 | 55 | | 1,229 |
| Current taxes on income, wealth, etc. | | | 213 | | | 213 | 0 | | 213 |
| Net social contributions | 66 | 213 | 50 | 0 | 4 | 333 | 0 | | 333 |
| Social benefits other than social transfers in kind | | | | 384 | | 384 | 0 | | 384 |
| Other current transfers | 6 | 62 | 104 | 36 | 36 | 244 | 55 | | 299 |
| Use of disposable income account | | | | | | | | | Resources |
| Disposable income, net | 71 | 13 | 290 | 1196 | 34 | 1,604 | | | 1,604 |
| Final consumption expenditure | | | | | | | | 1,399 | 1,399 |
| Adjustment for the change in pension entitlements | | | | 11 | | 11 | 0 | | 11 |

| Capital account | | | | | | | | Changes in liabilities and net worth | DRAFT BPM7 – Chapters only |
|---|------------|-----------|------------|------------|-----------|------------|-------------|---|-----------------------------------|
| Saving, net | 71 | 2 | -62 | 192 | 2 | 205 | | 205 | |
| Current external balance | | | | | | | -13 | -13 | |
| Gross capital formation | | | | | | | 414 | 414 | |
| Consumption of fixed capital | | | | | | | -222 | -222 | |
| Changes in inventories | | | | | | | 28 | 28 | |
| Acquisitions less disposals of valuables | | | | | | | 10 | 10 | |
| Acquisitions less disposals of nonproduced assets | | | | | | | 0 | 0 | |
| Capital transfers, receivable | 33 | 0 | 6 | 23 | 0 | 62 | 4 | 66 | |
| Capital transfers, payable | -16 | -7 | -34 | -5 | -3 | -65 | -1 | -66 | |
| Changes in net worth due to saving and capital transfers | 88 | -5 | -90 | 210 | -1 | 202 | -10 | 192 | Chapter 2 |

| Financial account | | | | | | | | Changes in liabilities and net worth |
|---|------------|------------|-------------|------------|-----------|------------|------------|--|
| <i>Net lending (+)/net borrowing (-)</i> | -56 | -1 | -103 | 174 | -4 | 10 | -10 | 0 |
| Net acquisition of liabilities | 139 | 173 | 93 | 15 | 6 | 426 | 57 | 483 |
| Monetary gold and SDRs | | | | | | | | |
| Monetary gold | | | | | | | | |
| SDRs | | | | | | | | 0 |
| Currency and deposits | | 65 | 37 | | | 102 | -2 | 100 |
| Debt securities | 6 | 30 | 38 | 0 | 0 | 74 | 21 | 95 |
| Loans | 21 | 0 | 9 | 11 | 6 | 47 | 35 | 82 |
| Equity and investment fund shares | 83 | 22 | | | | 105 | 14 | 119 |
| Insurance, pension, and standardized guarantee schemes | | 48 | 0 | | | 48 | 0 | 48 |
| Financial derivatives and employee stock options | 3 | 8 | 0 | 0 | 0 | 11 | 3 | 14 |

| | | | | | | | | |
|----|--------------------------------------|----|---|---|---|----|-----|----|
| 62 | Other accounts receivable/payable | 26 | 0 | 9 | 4 | 39 | -14 | 25 |
|----|--------------------------------------|----|---|---|---|----|-----|----|

| Other changes in the volume of assets account | | | | | | | | | |
|---|---------------------------|------------------------|--------------------|------------|--------|---------------|-------------------|--------------------|-------|
| Changes in assets | | | | | | | | | |
| Other flows | Nonfinancial corporations | Financial corporations | General government | Households | NPISHs | Total economy | Rest of the world | Goods and services | Total |
| Economic appearance of assets | 26 | 0 | 7 | 0 | 0 | 33 | | | 33 |
| Produced nonfinancial assets | | | 3 | | | 3 | | | 3 |
| Nonproduced nonfinancial assets | 26 | 0 | 4 | 0 | 0 | 30 | | | 30 |
| Economic disappearance of nonproduced nonfinancial assets | -9 | 0 | -2 | 0 | 0 | -11 | | | -11 |
| Other economic disappearance of nonproduced nonfinancial assets | -3 | 0 | 0 | 0 | 0 | -3 | | | -3 |
| Catastrophic losses | -5 | 0 | -6 | 0 | 0 | -11 | | | -11 |
| Uncompensated seizures | -5 | 0 | 5 | 0 | 0 | 0 | | | 0 |
| Other changes in volume n.e.c. | 1 | 1 | 0 | 0 | 0 | 2 | | | 2 |
| Changes in classification | 6 | -2 | -4 | 0 | 0 | 0 | | | 0 |
| Changes in sector classification and structure | 6 | 0 | -4 | 0 | 0 | 2 | | | 2 |

| | | | | | | | |
|--|----|----|----|---|---|----|----|
| Changes in classification of assets and liabilities | 0 | -2 | 0 | 0 | 0 | -2 | -2 |
| Total other changes in volume | 14 | -1 | 0 | 0 | 0 | 13 | 13 |
| Produced nonfinancial assets | -2 | -2 | -3 | 0 | 0 | -7 | -7 |
| Nonproduced nonfinancial assets | 14 | 0 | 3 | 0 | 0 | 17 | 17 |
| Financial assets | 2 | 1 | 0 | 0 | 0 | 3 | 3 |
| Monetary gold and SDRs | | | | | | 0 | 0 |
| Currency and deposits | | | | | | 0 | 0 |
| Debt securities | | | | | | 0 | 0 |
| Loans | | | | | | 0 | 0 |
| Equity and investment fund shares/units | 2 | | | | | 2 | 2 |
| Insurance, pension, and standardized guarantee schemes | | 1 | | | | 1 | 1 |
| Financial derivatives and employee stock options | | | | | | 0 | 0 |
| Other accounts receivable/payable | | | | | | 0 | 0 |

| | | | | | | | |
|---|------------|-----------|-----------|-----------|----------|------------|------------|
| Revaluation account | | | | | | | |
| Changes in assets | | | | | | | |
| Nonfinancial assets | 144 | 4 | 44 | 80 | 8 | 280 | 280 |
| Produced nonfinancial assets | 63 | 2 | 21 | 35 | 5 | 126 | 126 |
| Nonproduced nonfinancial assets | 81 | 2 | 23 | 45 | 3 | 154 | 154 |
| Financial assets/liabilities | 8 | 57 | 1 | 16 | 2 | 84 | 7 |
| Monetary gold and SDRs | | 11 | 1 | | | 12 | 12 |
| Currency and deposits | | | | | | 0 | 0 |
| Debt securities | 3 | 30 | | 6 | 1 | 40 | 4 |
| Loans | | | | | | 0 | 0 |
| Equity and investment fund shares/units | 5 | 16 | | 10 | 1 | 32 | 3 |
| Insurance, pension, and standardized guarantee schemes | | | | | | 0 | 0 |
| Financial derivatives and employee stock options | | | | | | 0 | 0 |
| Other accounts receivable/payable | | | | | | 0 | 0 |

| Other changes in the volume of assets account | | | | | | | | | Changes in liabilities and net worth |
|--|----------------------------------|-------------------------------|---------------------------|--------------------|----------------|----------------------|--------------------------|---------------------------|---|
| Other flows | Nonfinancial corporations | Financial corporations | General government | House holds | NPI SHs | Total economy | Rest of the world | Goods and services | Total |
| Economic appearance of assets | | | | | | | | | |
| Produced nonfinancial assets | | | | | | | | | |
| Nonproduced nonfinancial assets | | | | | | | | | |
| Economic disappearance of nonproduced nonfinancial assets | | | | | | | | | |
| Other economic disappearance of nonproduced nonfinancial assets | | | | | | | | | |
| Catastrophic losses | | | | | | | | | |
| Uncompensated seizures | | | | | | | | | |
| Other changes in volume n.e.c. | 0 | 0 | 0 | 1 | 0 | 1 | | | 1 |
| Changes in classification | 0 | 0 | 2 | 0 | 0 | 2 | | | 2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Changes in sector classification and structure | 0 | 0 | 2 | 0 | 0 | 2 | 2 |
| Changes in classification of assets and liabilities | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total other changes in volume | 0 | 0 | 2 | 1 | 0 | 3 | 3 |
| Produced nonfinancial assets | | | | | | | |
| Nonproduced nonfinancial assets | | | | | | | |
| Financial assets | 0 | 0 | 2 | 1 | 0 | 3 | 3 |
| Monetary gold and SDRs | | | | | | | |
| Currency and deposits | | | | | | | |
| Debt securities | | | | | | | |
| Loans | | | | | | 0 | 0 |
| Equity and investment fund shares/units | | | 2 | | | 2 | 2 |
| Insurance, pension, and standardized guarantee schemes | | | | 1 | | 1 | 1 |

| | | | | | | | | | |
|--|----|----|----|----|---|----|----|--|---|
| Financial derivatives and employee stock options | | | | | | | | | |
| Other accounts receivable/payable | | | | | | | | | |
| <i>Changes in net worth due to other changes in volume of assets</i> | 14 | -1 | -2 | -1 | 0 | 10 | | | |
| Revaluation account | | | | | | | | | Changes in liabilities and net worth |
| Nonfinancial assets | | | | | | | | | |
| Produced nonfinancial assets | | | | | | | | | |
| Nonproduced nonfinancial assets | | | | | | | | | |
| Financial assets/liabilities | 18 | 51 | 7 | 0 | 0 | 76 | 15 | | 91 |
| Monetary gold and SDRs | | | | | | | 12 | | 12 |
| Currency and deposits | | | | | | | | | |
| Debt securities | 1 | 34 | 7 | | | 42 | 2 | | 44 |

| | | | | | | | | |
|--|-----|----|----|----|----|-----|----|-----|
| Loans | | | | | | | | |
| Equity and investment fund shares/units | 17 | 17 | | | 34 | 1 | | 35 |
| Insurance, pension, and standardized guarantee schemes | | | | | | | | |
| Financial derivatives and employee stock options | | | | | | | | |
| Other accounts receivable/payable | | | | | | | | |
| <i>Changes in net worth due to nominal holding gains/losses</i> | 134 | 10 | 38 | 96 | 10 | 288 | -8 | 280 |

| Stocks and changes in assets | Nonfinancial corporations | Financial corporations | General government | Households | NPISHs | Total economy | Rest of the world account | Goods and services account | Total |
|--|---------------------------|------------------------|--------------------|------------|--------|---------------|---------------------------|----------------------------|-------|
| Opening balance sheet | | | | | | | | | |
| Nonfinancial assets | 2,151 | 93 | 789 | 1,429 | 159 | 4,621 | | | 4,621 |
| Produced nonfinancial assets | 1,274 | 67 | 497 | 856 | 124 | 2,818 | | | 2,818 |
| Nonproduced nonfinancial assets | 877 | 26 | 292 | 573 | 35 | 1,803 | | | 1,803 |
| Financial assets/liabilities | 982 | 3,421 | 396 | 3,260 | 172 | 8,231 | 805 | | 9,036 |
| Monetary gold and SDRs | | 690 | 80 | | | 770 | | | 770 |
| Currency and deposits | 382 | | 150 | 840 | 110 | 1,482 | 105 | | 1,587 |
| Debt securities | 90 | 950 | | 198 | 25 | 1,263 | 125 | | 1,388 |
| Loans | 50 | 1,187 | 115 | 24 | 8 | 1,384 | 70 | | 1,454 |
| Equity and investment fund shares/units | 280 | 551 | 12 | 1,749 | 22 | 2,614 | 345 | | 2,959 |
| Insurance, pension, and standardized guarantee schemes | 25 | 30 | 20 | 391 | 4 | 470 | 26 | | 496 |

| | | | | | | | | |
|--|-----|-----|-----|-----|----|-----|-----|-----|
| Financial derivatives and employee stock options | 5 | 13 | 0 | 3 | 0 | 21 | 0 | 21 |
| Other accounts receivable/payable | 150 | | 19 | 55 | 3 | 227 | 134 | 361 |
| Total changes | | | | | | | | |
| Nonfinancial assets | 300 | -2 | 57 | 116 | 11 | 482 | | 482 |
| Produced nonfinancial assets | 195 | -4 | 29 | 67 | 7 | 294 | | 294 |
| Nonproduced nonfinancial assets | 105 | 2 | 28 | 49 | 4 | 188 | | 188 |
| Financial assets/liabilities | 93 | 230 | -9 | 205 | 4 | 523 | 54 | 577 |
| Monetary gold and SDRs | 0 | 10 | 1 | 0 | 0 | 11 | 1 | 12 |
| Currency and deposits | 39 | 10 | -26 | 64 | 2 | 89 | 11 | 100 |
| Debt securities | 10 | 96 | 4 | 16 | 0 | 126 | 13 | 139 |
| Loans | 19 | 53 | 3 | 3 | 0 | 78 | 4 | 82 |
| Equity and investment fund shares/units | 17 | 44 | 3 | 76 | 1 | 141 | 15 | 156 |
| Insurance, pension, and standardized guarantee schemes | 1 | 8 | 1 | 39 | 0 | 49 | 0 | 49 |

| | | | | | | | | |
|--|-------|-------|-----|-------|-----|-------|-----|-------|
| Financial derivatives and employee stock options | 3 | 8 | 0 | 3 | 0 | 14 | 0 | 14 |
| Other accounts receivable/payable | 4 | 1 | 5 | 4 | 1 | 15 | 10 | 25 |
| Closing balance sheet | | | | | | | | |
| Nonfinancial assets | 2,451 | 91 | 846 | 1,545 | 170 | 5,103 | | 5,103 |
| Produced nonfinancial assets | 1,469 | 63 | 526 | 923 | 131 | 3,112 | | 3,112 |
| Nonproduced nonfinancial assets | 982 | 28 | 320 | 622 | 39 | 1,991 | | 1,991 |
| Financial assets/liabilities | 1,075 | 3,651 | 387 | 3,465 | 176 | 8,754 | 859 | 9,613 |
| Monetary gold and SDRs | 0 | 700 | 81 | 0 | 0 | 781 | 1 | 782 |
| Currency and deposits | 421 | 10 | 124 | 904 | 112 | 1,571 | 116 | 1,687 |
| Debt securities | 100 | 1,046 | 4 | 214 | 25 | 1,389 | 138 | 1,527 |
| Loans | 69 | 1,240 | 118 | 27 | 8 | 1,462 | 74 | 1,536 |
| Equity and investment fund shares/units | 297 | 595 | 15 | 1,825 | 23 | 2,755 | 360 | 3,115 |
| Insurance, pension, and standardized guarantee schemes | 26 | 38 | 21 | 430 | 4 | 519 | 26 | 545 |

| | | | | | | | | |
|--|-----|----|----|----|---|-----|-----|-----|
| Financial derivatives and employee stock options | 8 | 21 | 0 | 6 | 0 | 35 | 0 | 35 |
| Other accounts receivable/payable | 154 | 1 | 24 | 59 | 4 | 242 | 144 | 386 |

| Stocks and changes in liabilities | Nonfinancial corporations | Financial corporations | General government | House holds | NPI SHs | Total economy | Rest of the world account | Goods and services account | Total |
|---|----------------------------------|-------------------------------|---------------------------|--------------------|----------------|----------------------|----------------------------------|-----------------------------------|--------------|
| Opening balance sheet | | | | | | | | | |
| Nonfinancial assets | | | | | | | | | |
| Produced nonfinancial assets | | | | | | | | | |
| Nonproduced nonfinancial assets | | | | | | | | | |
| Financial assets/liabilities | 3,221 | 3,544 | 687 | 189 | 121 | 7,762 | 1,274 | | 9,036 |
| Monetary gold and SDRs | | | | | | 0 | 770 | | 770 |
| Currency and deposits | 40 | 1,281 | 102 | 10 | 38 | 1,471 | 116 | | 1,587 |
| Debt securities | 44 | 1,053 | 212 | 2 | | 1,311 | 77 | | 1,388 |
| Loans | 897 | | 328 | 169 | 43 | 1,437 | 17 | | 1,454 |
| Equity and investment fund shares/units | 1,987 | 765 | 4 | | | 2,756 | 203 | | 2,959 |
| Insurance, pension, and standardized guarantee schemes | 12 | 435 | 19 | | 5 | 471 | 25 | | 496 |
| Financial derivatives and employee stock options | 4 | 10 | | | | 14 | 7 | | 21 |

| | | | | | | | | | |
|--|------------|------------|------------|--------------|------------|--------------|-------------|--|--------------|
| Other accounts receivable/payable | 237 | | 22 | 8 | 35 | 302 | 59 | | 361 |
| Net worth | -88 | -30 | 498 | 4,500 | 210 | 5,090 | -469 | | 4,621 |
| Total changes | | | | | | | | | |
| Nonfinancial assets | | | | | | | | | |
| Produced nonfinancial assets | | | | | | | | | |
| Nonproduced nonfinancial assets | | | | | | | | | |
| Financial assets/liabilities | 157 | 224 | 102 | 16 | 6 | 505 | 72 | | 577 |
| Monetary gold and SDRs | | | | | | | 12 | | 12 |
| Currency and deposits | 0 | 65 | 37 | 0 | 0 | 102 | -2 | | 100 |
| Debt securities | 7 | 64 | 45 | 0 | 0 | 116 | 23 | | 139 |
| Loans | 21 | 0 | 9 | 11 | 6 | 47 | 35 | | 82 |
| Equity and investment fund shares/units | 100 | 39 | 2 | 0 | 0 | 141 | 15 | | 156 |
| Insurance, pension, and standardized guarantee schemes | 0 | 48 | 0 | 1 | 0 | 49 | 0 | | 49 |

| | | | | | | | | |
|--|------------|----------|------------|------------|----------|------------|------------|------------|
| Financial derivatives and employee stock options | 3 | 8 | 0 | 0 | 0 | 11 | 3 | 14 |
| Other accounts receivable/payable | 26 | 0 | 9 | 4 | 0 | 39 | -14 | 25 |
| Changes in net worth, total | 236 | 4 | -54 | 305 | 9 | 500 | -18 | 482 |
| <i>Saving and capital transfers</i> | 88 | -5 | -90 | 210 | -1 | 202 | -10 | 192 |
| <i>Other changes in volume of assets</i> | 14 | -1 | -2 | -1 | 0 | 10 | | 10 |
| <i>Nominal holding gains/losses</i> | 134 | 10 | 38 | 96 | 10 | 288 | -8 | 280 |
| Neutral holding gains/losses | 82 | 6 | 27 | 87 | 6 | 208 | -10 | 198 |
| Real holding gains/losses | 52 | 4 | 11 | 9 | 4 | 80 | 2 | 82 |
| Closing balance sheet | | | | | | | | |
| Nonfinancial assets | | | | | | | | |
| Produced nonfinancial assets | | | | | | | | |
| Nonproduced nonfinancial assets | | | | | | | | |

| | | | | | | | | |
|---|--------------|--------------|------------|--------------|------------|--------------|--------------|--------------|
| Financial assets/liabilities | 3,378 | 3,768 | 789 | 205 | 127 | 8,267 | 1,346 | 9,613 |
| Monetary gold and SDRs | | | | | | | 782 | 782 |
| Currency and deposits | 40 | 1,346 | 139 | 10 | 38 | 1,573 | 114 | 1,687 |
| Debt securities | 51 | 1,117 | 257 | 2 | 0 | 1,427 | 100 | 1,527 |
| Loans | 918 | 0 | 337 | 180 | 49 | 1,484 | 52 | 1,536 |
| Equity and investment fund shares/units | 2,087 | 804 | 6 | 0 | 0 | 2,897 | 218 | 3,115 |
| Insurance, pension, and standardized guarantee schemes | 12 | 483 | 19 | 1 | 5 | 520 | 25 | 545 |
| Financial derivatives and employee stock options | 7 | 18 | 0 | 0 | 0 | 25 | 10 | 35 |
| Other accounts receivable/payable | 263 | 0 | 31 | 12 | 35 | 341 | 45 | 386 |
| <i>Net worth</i> | 148 | -26 | 444 | 4,805 | 219 | 5,590 | -487 | 5,103 |

Table 2.5. Link between Instrument and Functional Categories

| Table 2.5a. Balance of Payments Financial Account by Instrument (consistent with data in Table 2.3) | | | |
|---|-------------------|------------------------|---------|
| Financial account (by instrument) | Changes in assets | Changes in liabilities | Balance |
| Monetary gold and SDRs | 0 | 1 | |
| Currency and deposits | -2 | 11 | |
| Debt securities | 21 | 9 | |
| Loans | 35 | 4 | |
| Equity and investment fund shares | 14 | 12 | |
| Insurance, pension, and standardized guarantee schemes | 0 | 0 | |
| Financial derivatives and ESOs | 3 | 0 | |
| Other accounts receivable/payable | -14 | 10 | |
| Total changes in assets/liabilities | 57 | 47 | |
| Net lending (+)/net borrowing (-) (from financial account) | | | 10 |
| Note: ESO = employee stock option. | | | |

| Table 2.5b. IIP by Instrument <i>(Consistent with data in Table 2.3)</i> | | | | | |
|--|-------------------------|---------------------------------|--------------------------------|--------------------|-------------------------|
| International investment position | Opening position | Transactions (fin. acc.) | Other changes in volume | Revaluation | Closing position |
| Assets (instrument split) | | | | | |
| Monetary gold and SDRs | 770 | 0 | 0 | 12 | 782 |
| Currency and deposits | 116 | -2 | 0 | 0 | 114 |
| Debt securities | 77 | 21 | 0 | 2 | 100 |
| Loans | 17 | 35 | 0 | 0 | 52 |
| Equity and investment fund shares | 203 | 14 | 0 | 1 | 218 |
| Insurance, pension, and standardized guarantee schemes | 25 | 0 | 0 | 0 | 25 |
| Financial derivatives and ESOs | 7 | 3 | 0 | 0 | 10 |
| Other accounts receivable/payable | 59 | -14 | 0 | 0 | 45 |
| Total | 1,274 | 57 | 0 | 15 | 1,346 |
| Liabilities (instrument split) | | | | | |
| Monetary gold and SDRs | 0 | 1 | 0 | 0 | 1 |
| Currency and deposits | 105 | 11 | 0 | 0 | 116 |
| Debt securities | 125 | 9 | 0 | 4 | 138 |
| Loans | 70 | 4 | 0 | 0 | 74 |
| Equity and investment fund shares | 345 | 12 | 0 | 3 | 360 |
| Insurance, pensions, and standardized guarantee schemes | 26 | 0 | 0 | 0 | 26 |
| Financial derivatives and ESOs | 0 | 0 | 0 | 0 | 0 |

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| | | | | | |
|--|------------|-----------|----------|----------|------------|
| Other accounts receivable/payable | 134 | 10 | 0 | 0 | 144 |
| Total | 805 | 47 | 0 | 7 | 859 |
| Net IIP | 469 | 10 | 0 | 8 | 487 |

Table 2. 5c. Conversion of Data from Instrument Split to Functional Categories

(Consistent with data in Table 2.3)

| | Functional categories | | | | | |
|---|-----------------------|-----------|----------|-----------|----------|-----------|
| | DI | PI | FD | OI | RA | Total |
| Financial account | | | | | | |
| Assets (instrument split) | | | | | | |
| Monetary gold and SDRs | | | | | | |
| Currency and deposits | | | | -5 | 3 | -2 |
| Debt securities | 2 | 14 | | | 5 | 21 |
| Loans | | | | 35 | | 35 |
| Equity and investment fund shares | 10 | 4 | | | | 14 |
| Insurance, pension, and standardized guarantee schemes | | | | | | |
| Financial derivatives and ESOs | | | 3 | | | 3 |
| Other accounts receivable/payable | -4 | | | -10 | | -14 |
| Total | 8 | 18 | 3 | 20 | 8 | 57 |

| | | | | | | | |
|---|-----------|-----------|----------|-----------|----------|-----------|-----|
| Liabilities (instrument split) | | | | | | | |
| Monetary gold and SDRs | | | | | 1 | | 1 |
| Currency and deposits | | | | | 11 | | 11 |
| Debt securities | 4 | 5 | | | | | 9 |
| Loans | | | | | 4 | | 4 |
| Equity and investment fund shares | 3 | 9 | | | | | 12 |
| Insurance, pension, and standardized guarantee schemes | | | | | | | |
| Financial derivatives and ESOs | | | | | | | |
| Other accounts receivable/payable | 4 | | | | 6 | | 10 |
| Total | 11 | 14 | 0 | 22 | 0 | 47 | |
| IIP (opening) | | | | | | | |
| Assets (instrument split) | | | | | | | |
| Monetary gold and SDRs | | | | | | 770 | 770 |
| Currency and deposits | | | | | 80 | 36 | 116 |

| | | | | | | |
|---|------------|------------|----------|------------|------------|--------------|
| Debt securities | 10 | 40 | | | 27 | 77 |
| Loans | | | | 17 | | 17 |
| Equity and investment fund shares | 53 | 150 | | | | 203 |
| Insurance, pension, and standardized guarantee schemes | | | | 25 | | 25 |
| Financial derivatives and ESOs | | | 7 | | | 7 |
| Other accounts receivable/payable | 15 | | | 44 | | 59 |
| Total | 78 | 190 | 7 | 166 | 833 | 1,274 |
| Liabilities (instrument split) | | | | | | |
| Monetary gold and SDRs | | | | | | |
| Currency and deposits | | | | 105 | | 105 |
| Debt securities | 15 | 110 | | | | 125 |
| Loans | | | | 70 | | 70 |
| Equity and investment fund shares | 155 | 190 | | | | 345 |

| | | | | | | | |
|---|------------|------------|----------|--|------------|-----------|------------|
| Insurance, pension, and standardized guarantee schemes | | | | | 26 | | 26 |
| Financial derivatives and ESOs | | | | | | | |
| Other accounts receivable/payable | 40 | | | | 94 | | 134 |
| Total | 210 | 300 | 0 | | 295 | 0 | 805 |
| Revaluation | | | | | | | |
| Assets (instrument split) | | | | | | | |
| Monetary gold and SDRs | | | | | | 12 | 12 |
| Debt securities | 1 | 1 | | | | | 2 |
| Equity and investment fund shares | | 1 | | | | | 1 |
| Total | 1 | 2 | 0 | | 0 | 12 | 15 |
| Liabilities (instrument split) | | | | | | | |
| Debt securities | 1 | 3 | | | | | 4 |
| Equity and investment fund shares | 1 | 2 | | | | | 3 |

| | | | | | | |
|---|-----------|------------|-----------|------------|------------|--------------|
| Total | 2 | 5 | 0 | 0 | 0 | 7 |
| IIP (closing) | | | | | | |
| Assets (instrument split) | | | | | | |
| Monetary gold and SDRs | | | | | 782 | 782 |
| Currency and deposits | | | | 75 | 39 | 114 |
| Debt securities | 13 | 55 | | | 32 | 100 |
| Loans | | | | 52 | | 52 |
| Equity and investment fund shares | 63 | 155 | | | | 218 |
| Insurance, pension, and standardized guarantee schemes | | | | 25 | | 25 |
| Fin. deriv and ESOs | | | 10 | | | 10 |
| Other accounts receivable/payable | 11 | | | 34 | | 45 |
| Total | 87 | 210 | 10 | 186 | 853 | 1,346 |
| Liabilities (instrument split) | | | | | | |
| Monetary gold and SDRs | | | | 1 | | 1 |

| | | | | | | | |
|---|------------|------------|----------|------------|----------|--|------------|
| Currency and deposits | | | | 116 | | | 116 |
| Debt securities | 20 | 118 | | | | | 138 |
| Loans | | | | 74 | | | 74 |
| Equity and investment fund shares | 159 | 201 | | | | | 360 |
| Insurance, pension, and standardized guarantee schemes | | | | 26 | | | 26 |
| Fin. deriv and ESOs | | | | | | | |
| Other accounts receivable/payable | 44 | | | 100 | | | 144 |
| Total | 223 | 319 | 0 | 317 | 0 | | 859 |
| <p>Note: DI = direct investment. PI = portfolio investment. FD = financial derivatives (other than reserves) and employee stock options. OI = other investment. RA = reserve assets</p> | | | | | | | |

Chapter 3. Flows, Stocks, and Accounting Rules

(Joint SNA/BPM chapter – Update to *BPM6* Chapter 3)

Chapter 4 (2025 SNA)/Chapter 3 (BPM7): Flows, stocks and accounting rules (revised title) (OLD Chapter 3: Stocks, flows and accounting rules)

This chapters uses chapter 3 of the 2008 SNA as a starting point. Please note that the order of the discussion of stocks (section B in the 2008 SNA) and flows (section C in the 2008 SNA) has been reversed. This has not been highlighted in the form of track changes.

A. Introduction

- 4.1 The SNA and the BOP/IIP are systems of accounts designed to measure stocks of, and changes in, economic value and to identify the person, group of persons, legal or social entity with claims on the economic value, including such claims between residents and non-residents. This chapter discusses the concept of stocks of economic value, the flows that reflect changes in economic value and the accounting rules applied to the recording of stocks and flows. In order to portray stocks and flows in an accounting system, it is necessary to identify the parties with a claim to economic value measured in stocks or affected by flows. These parties are the persons, groups of persons, legal and social entities already referred to. They are described as institutional units in the SNA/BPM and are grouped into institutional sectors according to their economic objectives, functions and behaviour. Units and sectors are the subject of chapter 5/4.
- 4.2 Stocks measure economic value at a point in time. Flows measure changes in economic value over a period of time. Stocks appear in the balance sheets /international investment position (IIP) and related tables. Flows appear in all the other accounts and tables of the SNA/BPM. The flow accounts in the full sequence of economic accounts for institutional sectors in the SNA consist of the current accounts, which deal with production, income and use of income, and the accumulation accounts (capital account, financial account and other changes in assets and liabilities account), which show all changes between two balance sheets. The flow accounts in external accounts consist of the current account, capital account, and the accumulation accounts (financial account and other changes in financial assets and liabilities account), which show all changes between two IIP statements.
- 4.3 In order to have a system that is complete and consistent, all changes in economic value between stock measures (IIP in the case of external accounts) at two points in time must be captured in flows. The first requirement in specifying the accounting conventions is thus to define precisely what is meant by stocks and flows. Once that is done, the rules to set the changes in economic value within an accounting system need to be specified. These rules are defined to ensure that the SNA/BPM is consistent in terms of value, time of recording and classification.

1. Stocks and flows

- 4.4 *Stocks refer to the levels of financial/non-financial assets or liabilities at a point in time. In the case of financial assets/liabilities, usually the term “positions” is used, while for levels of non-financial assets, the term “stocks” is often applied.* The SNA/BPM records stocks in accounts, usually referred to as balance sheets (or IIP in the case of external accounts), compiled in respect of the beginning and end of the accounting period. However, stocks are connected with flows: they result from the accumulation of prior transactions and other flows, and they are changed by transactions and other flows in the period. They result in fact from a continuum of entries and withdrawals, with some changes in volume or in value occurring during the time a given asset or liability is held.

- 4.5 *An asset is a store of value representing a benefit or series of benefits accruing to the economic owner by holding or using the item over a period of time. It is a means of carrying forward value from one accounting period to another.* Assets may be financial in nature or not. For almost all financial assets, there is a corresponding [financial] liability. *A liability is established when one unit (the debtor) is obliged, under specific circumstances, to provide a payment or series of payments to another unit (the creditor).* An elaboration of these definitions and the concepts embodied in them as well as a typology of the different assets and liabilities in the SNA/BPM is given in section C of this chapter.
- 4.6 *Economic flows reflect the creation, transformation, exchange, transfer or extinction of economic value; they typically involve changes in the volume, composition, or value of an institutional unit's assets and liabilities.* Mirroring the diversity of the economy, economic flows have specific natures as wages, taxes, interest, capital flows, etc., most of which record the ways in which a unit's assets and liabilities are changed.
- 4.7 Economic flows consist of transactions and other flows. *A transaction is an economic flow that is an interaction between institutional units by mutual agreement or an action within an institutional unit that is analytically useful to treat like a transaction, often because the unit is operating in two different capacities.* The value of an asset or a liability may be affected by economic flows that do not satisfy the requirements of a transaction. Such flows are described as "other flows". *Other flows are changes in the value of assets and liabilities that do not result from transactions.* Examples are losses due to natural disasters and the effect of price changes on the value of assets and liabilities. In the case of external accounts, these flows occur between a resident and a non-resident institutional unit.
- 4.8 There is a discussion of the different types of economic flows in section B of this chapter.

2. Balancing items

- 4.9 Economic flows are grouped together into accounts with expenditures or changes in assets on the left-hand side and revenues, or changes in liabilities or net worth on the right-hand side. Economic flows are grouped together into accounts with credit entries on one side and debit entries on the other side. *A balancing item is an accounting construct obtained by subtracting the total value of the entries on one side of an account (credits, revenues or changes in liabilities) from the total value of the entries on the other side (debits, expenditures or changes in assets). It cannot be measured independently of the entries in the accounts; as a derived entry, it reflects the application of the general accounting rules to the specific entries on the two sides of the account.* There is also a balancing item for the balance sheet/IIP where the difference between assets and liabilities is known as net worth/net IIP.
- 4.10 Balancing items are constructed because they convey interesting economic information. Many of the key aggregates of the SNA/BPM actually emerge as balancing items. Balancing items are discussed in section D.

3. Grouping stocks and flows into accounts

- 4.11 The accounts and tables of the SNA/BPM contain information relating to the economic actions or events that take place within a given period of time (between residents and non-residents) and the effect of these events on the stocks of (external) assets and liabilities between the beginning and end of that period.
- 4.12 The flows and stocks are grouped according to the classification hierarchy of the SNA/BPM, shown in annex 1. The classification of transactions and other flows has five headings in SNA/BPM at the highest level, dealing with transactions in products (goods and services in balance of payments), transactions showing how income is distributed and redistributed within the SNA/BOP, transactions in non-produced assets, transactions in financial assets and liabilities, and other accumulation entries. In the accumulation accounts, the hierarchy may show both the transaction and the type of asset it applies to.
- 4.13 The flows and stocks are entered in the accounts of the institutional units involved and thus in the accounts of the sectors into which the institutional units are grouped. Institutional units and sectors are the subject of chapter 5. In general, flows and stocks are entered in the accounts of the institutional units that own or owned the goods and

assets involved, in the accounts of units that deliver or take delivery of services, or in the accounts of units that provide labour and capital or use them in production. For some purposes, an institutional unit participating in production is viewed as one or more establishments and establishments may be grouped into industries. Establishments and industries are defined and discussed in chapter 6.

- 4.14 The flows and stocks of external assets and liabilities are entered in the accounts of the institutional units that issue liabilities (e.g., debt securities) or hold assets (e.g., deposits) and thus in the accounts of the sectors into which the institutional units are grouped. Institutional units and sectors are the subject of chapter 4.

4. Accounting rules

- 4.15 All entries in the accounts have to be measured in monetary terms, and therefore the elements from which the entries are built up must be measured in monetary terms. In some cases, the amounts entered are the actual payments that form part of flows that involve money; in other cases the amounts entered are estimated by reference to actual monetary values. Money is thus the unit of account in which all stocks and flows are recorded.

- 4.16 In principle, any lapse of time may be chosen as the accounting period. Periods that are too short have the disadvantage that statistical data are influenced by incidental factors, while long periods do not adequately portray changes going on in the economy. Merely seasonal effects can be avoided by having the accounting period cover a whole cycle of regularly recurrent economic phenomena. Most business and government accounting refers to complete years. In general, calendar or financial years or quarters are best suited for drawing up a full set of national accounts/external accounts.

- 4.17 The SNA covers all economic activity in such a way that it is possible to derive accounts for individual groups of units or for all units in the economy. The BPM covers all economic activity between residents and non-residents in such a way that it is possible to derive current/capital account items and financial flows/stocks (functional categories/institutional sectors) by partner economy. To permit this, the accounting rules ensure consistency with respect to valuation, timing, classification and grouping of flows and stocks. These rules are summarized below to provide a context for the discussion of the nature of flows, stocks, and balancing items in sections B, C and D.

- Flows and stocks must be recorded consistently with respect to their valuation. Entries are at current value on the market (that is, the amount agreed upon by two parties) or at its closest equivalent. The value on the market may need to be adjusted to the coverage of the flow or stock as defined in the SNA/BPM and expressed appropriately given the nature of the flow or stock with respect to taxes and subsidies on products, transport costs and trade margins.
- Flows and stocks must be recorded consistently with respect to timing. Flows are recorded at the moment of accrual within the accounting period (that is, the moment economic value is created, transformed, exchanged, transferred or extinguished). Stocks are recorded at the moment to which the account relates, typically the beginning or end of the accounting period.
- Individual flow and stock entries must be recorded consistently with respect to their classification, both in respect of the categories in the classifications of transactions, other flows and assets and the categories in the classification of transactors as (sub)sectors or industries.
- Depending on the character of the entry, a distinction should be made between revenues and expenditures (credits/revenues and debits/expenditures in balance of payments) or between assets and liabilities. In the process of grouping, netting is implicit for several items, but consolidation is not advised.

- 4.18 The basic accounting framework of the SNA/BPM is one of quadruple accounting. This implies that a transaction gives rise to two entries for each party to the transaction. There is vertical consistency within each unit and horizontal consistency between the two units for each type of entry. The principles of quadruple accounting are explained in more detail in section E in this chapter.

B. Flows

- 4.19 Economic flows are of two kinds. The first kind consists of transactions. Flows that do not meet the characteristics of transactions as described below are called “other flows”. Transactions appear in all of the accounts and tables in which flows appear except the other changes in the volume of assets and liabilities account and the revaluation account. Other flows appear in only these two accounts. More meaning can be given to the definition of flows by describing the two kinds.

1. Transactions

- 4.20 *A transaction is an economic flow that is an interaction between institutional units by mutual agreement or an action within an institutional unit that is analytically useful to treat like a transaction, often because the unit is operating in two different capacities.*

- 4.21 Institutional units, referred to in the definition, are the fundamental economic units used in macroeconomic statistics. They are described and defined in chapter 5/4. The following are the main attributes of institutional units that are relevant to their engaging in transactions:

- They are entitled to own assets in their own right, and therefore are able to exchange them;
- They are able to take economic decisions and engage in economic activities for which they are held to be directly responsible and accountable at law;
- They are typically able to incur liabilities on their own behalf, to take on other obligations or future commitments and to enter into contracts.

- 4.22 The definition of a transaction stipulates that an interaction between institutional units be by mutual agreement. When a transaction is undertaken by mutual agreement, the prior knowledge and consent of the institutional units is implied. This does not mean, however, that both units necessarily enter a transaction voluntarily, because some transactions are imposed by force of law, such as payments of taxes or other compulsory transfers. Although individual institutional units are not free to fix the amounts of taxes they pay, there is nevertheless collective recognition and acceptance by the community of the obligation to pay taxes. Thus, payments of taxes are considered transactions despite being compulsory.

- 4.23 In the external accounts (and the institutional sector accounts for the **rest of the world in the SNA**), transactions are recorded between two institutional units, one of which is a resident of the compiling economy and the other a non-resident. By the nature of external accounts, intra-unit or internal transactions are not recorded.¹ The flows between the branch and its parent enterprise are shown as interactions between institutional units, with a branch recognized as a separate institutional unit (a quasi-corporation). Similarly, when a notional enterprise (a quasi-corporation) is created for holding land and associated buildings by non-resident owners, the flows between the non-resident owners and the notional enterprise are considered interactions between institutional units.

¹ In the national accounts, transactions cover also some actions within an institutional unit (intra-unit transactions) with the purpose of providing a more analytically useful picture of output, final uses, and costs. Examples include depreciation and depletion, changes in inventories, and production for own final use of goods by producers. For further details on intra-unit (internal) transactions refer to **paragraphs xx, Chapter 4, 2025 SNA**.

- 4.24 Transactions between two resident institutional units in external assets are domestic transactions. Such transactions, however, affect the external asset positions of the two resident units involved. The external asset position of one resident unit is reduced and the position in the same external asset of another resident unit is increased, and thus leads to a change in domestic sectoral breakdown if the two parties are in different sectors. Such transactions result in changes in structure of external asset positions and should be recorded in the external accounts as a reclassification of sectors of holding (i.e., in the other changes in financial assets and liabilities account).² If both units fall in the same institutional sector, such reclassification entries cancel each other out and thus have no effect on sectoral positions. Similarly, when financial instruments issued by residents are exchanged between non-residents, no transactions are recorded in the balance of payments and there is no change in overall external liabilities.³
- 4.25 To establish whether a transaction involving an external financial asset is a transaction between a resident and a non-resident, the compiler must know the identities of both parties. The information available on transactions in claims constituting external assets may not, however, permit identification of the two parties to the transaction. That is, a compiler may not be able to ascertain whether a resident, who acquired or relinquished a claim on a non-resident, conducted the transaction with another resident or with a non-resident, or whether a non-resident dealt with another non-resident or with a resident. As a result, recorded external transactions may include not only those that involve assets and liabilities and take place between residents and non-residents but also those that involve financial assets of economies and take place between two residents and, to a lesser extent, transactions that take place between non-residents. (See also paragraphs xx, Annex II (BPM) on the additional issues associated with partner attribution of transactions in financial instruments between residents and non-residents. In addition, transactions between residents in external assets and liabilities may have to be taken into account for specific purposes, particularly as described in paragraph 14.21 (BPM).)
- 4.25-1 Some mutual agreements involve three parties. For example, guarantees involve the guarantor, the debtor, and the creditor. Transactions occurring between two parties (e.g., between the guarantor and debtor, or between the guarantor and creditor, or between the debtor and creditor) should always be identified and recorded as such. For one-off guarantees, the activation of the guarantee gives rise to transactions and, in some cases, other flows between each of the three pairs of the three parties. For each pair of parties, transactions in the external accounts are recorded if one party is a resident and another party is a nonresident.
- 4.26 Transactions take so many different forms that, even with these explanations, any general definition is inevitably rather imprecise. To give more precision, the various kinds of transactions have to be systematically described and classified. A first distinction is between monetary and non-monetary transactions. Other distinctions, such as between transactions with and without a quid pro quo, are drawn within each of these kinds of transactions. Frequently the individual, identifiable transactions of everyday economic life are simply grouped together in the accounts; sometimes they are subdivided and rearranged in order to form the transaction categories of the SNA/BPM.

Monetary transactions

- 4.27 ***A monetary transaction is one in which one institutional unit makes a payment (receives a payment) or incurs a liability (receives an asset) stated in units of currency.*** In the SNA/BPM, all flows are recorded in monetary terms, but the distinguishing characteristic of a monetary transaction is that the parties to the transaction express their agreement in monetary terms. For example, a good is purchased or sold at a given number of units of currency per unit of the good, or labour is hired or provided at a given number of units of currency per hour or day.
- 4.28 All monetary transactions are interactions between institutional units; that is, all monetary transactions are two-party transactions. The following is a list of common monetary transactions:
- Purchases of goods and services,

² The resident-to-resident transaction between the buyer and seller is recorded in the national accounts.

³ As discussed in paragraph A3.4, national contributions for compiling financial flows data in currency and economic unions may be allocated along the debtor-creditor approach as a way to ensure bilateral symmetry.

- Acquisitions of securities,
- Wages and salaries,
- Interest, dividends and rent,
- Taxes,
- Social assistance benefits in cash.

Transactions with and without a recompense

- 4.29 The purchases of goods and services, the acquisitions of securities, wages and salaries, and interest, dividends, and rent are two-party transactions in which one party provides a good, service, labour or asset to the other and receives a recompense of commensurate value in return. This kind of transaction is sometimes called a “something for something” transaction or a transaction with a quid pro quo. Such transactions are sometimes called exchanges.
- 4.30 Taxes and social assistance benefits are examples of two-party transactions in which one party provides a good, service or asset to the other but does not receive a recompense in return. This kind of transaction, sometimes called a “something for nothing” transaction, or a transaction without a quid pro quo, is called a transfer in the SNA/BPM.
- 4.31 The scope of the recompenses mentioned in describing exchanges and transfers does not cover entitlement to contingent benefits or collective services. Such benefits are generally uncertain or not quantifiable, or both. Moreover, the amount of benefit that may eventually be received by an individual unit is not proportional to the amount of the previous payment and may be much greater or smaller than the latter. Thus, payments such as a social insurance contribution or a non-life insurance premium may entitle the unit making the payment to some contingent future benefits, and a household paying taxes may be able to consume certain collective services provided by government units, but these payments are regarded as transfers rather than exchanges.
- 4.32 A distinction is made between current and capital transfers. A capital transfer is one in which the ownership of an asset (other than cash or inventories) is transferred or which obliges one or both parties to acquire, or dispose of, an asset (other than cash or inventories), or where a liability is forgiven by the creditor. Capital transfers redistribute wealth but leave saving unaffected. They include, for example, capital taxes and investment grants. Other transfers are described as current. Current transfers redistribute income. They include, for example, taxes on income and social benefits. A fuller description of transfers appears in chapter 9 (SNA) / chapter 13 (BPM).

Rearrangements of transactions for statistical purposes

- 4.33 Monetary transactions may not always be recorded in the macroeconomic accounts in the same way as they appear to the institutional units involved. The values of these actual, or observed, transactions are already available in the accounts of the units concerned, but the SNA/BOP rearranges certain transactions to bring out the underlying economic relationships more clearly. The three kinds of rearrangements affect the channels through which the transactions are seen as taking place, the number of transactions that are seen as taking place, or the units that are seen as being involved. The three sections below illustrate the main characteristics of these rearrangements and the kind of analytical purpose they serve.

Rerouting transactions

- 4.34 Rerouting records a transaction as taking place through channels that differ from the actual ones or as taking place in an economic sense when it does not take place in fact. In the first kind of rerouting, a direct transaction between unit A and unit C is recorded as taking place indirectly through a third unit B, usually, however, with some change in the transaction category. In the second kind of rerouting, a transaction of one kind from unit A to unit B is recorded with a matching transaction of a different kind from unit B to unit A.

- 4.35 The recording of the payment of social security contributions is an example of the first kind of rerouting. In practice, employers typically deduct the contributions that the employees are obliged to make to social security funds from the employee's wages and salaries. In addition, the employers make contributions to social security funds from their own resources on behalf of the employees. Both contributions go directly from the employer to social security funds. However, in the SNA/BPM, the employers' contributions are treated as part of remuneration of employees and are recorded as being paid to the employee. The employee is then recorded as making a payment to social security funds consisting of both the employer's and employee's own contributions. Social security contributions are thus recorded strictly according to the general principles governing the recording of transactions in the SNA/BPM to bring out the economic substance behind arrangements adopted for administrative convenience. As a result of the rerouting, employers' social contributions are included as a part of labour cost. (See [chapter 8 \(SNA\)](#) / [chapter 13 \(BPM\)](#).)
- 4.36 Similarly, the transfer elements of lotteries and other gambling are transactions through the gambling operator, but they are rerouted to occur directly between those participating in the lottery or gambling, that is, between households and possibly to charities (See [paragraph 9.xxx \(SNA\)](#) / [paragraph 9.xxx \(BPM\)](#).)
- 4.37 An example of the second kind of rerouting (also referred to as imputation in *BPM*) is provided by the treatment of the retained earnings of foreign direct investment enterprises. The retention of some or all of the earnings of a foreign direct investment enterprise within that enterprise can be regarded as a deliberate investment decision by the foreign owners. Accordingly, the retained earnings are rerouted in the SNA/BPM by showing them as first remitted to the foreign owners as property income and then reinvested in the equity of the direct investment enterprise. (See [paragraphs 8.xxx to 8.xxx \(SNA\)](#) / [paragraphs 12.xxx \(BPM7\)](#)). Retained earnings of investment funds are also treated as if they were distributed to shareholders who are then deemed to reinvest them in the investment fund. (See [paragraphs 8.xxx \(SNA\)](#) / [paragraphs 12.xxx \(BPM\)](#).)
- 4.38 Similarly, the property income earned on the reserves of life insurance corporations is deemed to be paid out to policyholders and then paid back again as premium supplements even though in actuality the property income is retained by the insurance enterprises. As a result, the saving of persons or households includes the amount of the rerouted property income while the saving of insurance enterprises does not. This alternative picture of saving, which better reflects economic reality, is the purpose of the rerouting. (See [paragraphs 8.xxx to 8.xxx \(SNA\)](#) / [paragraph 12.xxx and Annex 8 \(BPM\)](#).)
- 4.39 Another example of the second kind of rerouting relates to government having a non-resident entity that undertakes fiscal functions related to government borrowing or incurring government outlays abroad between the government and the non-resident entity related to these fiscal activities. In these cases, transactions are imputed in the accounts of both the government and the non-resident entity to reflect the fiscal activities of the government. (See [chapter 30 \(SNA\)](#) / [paragraphs 8.24 to 8.26, 12.xx, and 13.xx \(BPM\)](#).)
- 4.40 A further example of this type of rerouting, i.e., the recording of implicit taxes or subsidies associated with a multiple exchange rate regime is discussed in [paragraphs 8.98 e\), 8.99 c\) and 8.108 c\) \(SNA\)](#) / [paragraph 3.xx \(BPM\)](#).

Partitioning transactions

- 4.41 Partitioning records a transaction that is a single transaction from the perspective of the parties involved as two or more differently classified transactions. For example, the rental actually paid by the lessee under a financial lease is not recorded as a payment for a service; instead, it is partitioned into two transactions, a repayment of principal and a payment of interest. This partitioning of the rental payment is part of a treatment that implements an economic view of financial leasing in the SNA/BPM. Financial leasing is viewed as a method of financing the purchase of a fixed asset and a financial lease is shown in the SNA/BPM as a loan from the lessor to the lessee. (For a further elaboration, see SNA 2025 chapter 27 / chapter 5, *BPM7*)
- 4.42 Partitioning of transactions in assets may also be relevant in the case of non-financial assets which are used for two distinct purposes. An example is the purchase of a car by a household, which is partly used in production, such as providing taxi services to third parties, and partly used for own personal use. The former part is considered as gross fixed capital formation, while the latter part is to be recorded as final consumption expenditure.

- 4.43 Another example is the treatment of certain financial services. For example, the SNA/BPM prescribes partitioning interest payable by financial intermediaries on deposits and payable to financial intermediaries on loans into two components. One component represents interest as defined in the SNA/BPM while the remainder represents the purchase of financial intermediation services for which the intermediaries do not charge explicitly. The purpose of the partitioning is to make the service item explicit. In consequence, intermediate and final consumption of particular industries and institutional sectors as well as gross domestic product are affected. However, the saving of all the units concerned, including the financial intermediaries themselves, is not affected. (See paragraphs 7.xxx to 7.xxx (SNA) / paragraphs 11.xx (BPM).)
- 4.44 Likewise, when a financial derivative is settled with the delivery of the underlying asset, this single event should be broken down into a transaction in the financial derivative and a separate transaction in the underlying asset.
- 4.45 The recording in the SNA of transactions for wholesalers and retailers does not mirror the way in which those involved view them. The purchases of goods for resale by wholesalers and retailers are not recorded by these units explicitly, and they are viewed as selling, not the goods, but the services of storing and displaying a selection of goods in convenient locations and making them easily available for customers. This partitioning measures output for traders by the value of the margins realized on goods they purchase for resale.
- 4.46 Another example of partitioning transactions concerns the recording of package tours offered by tour operators, where it is recommended to unbundle the total amounts paid into the various service components. (See paragraph 11.xx (BPM).)

Reassigning transactions

- 4.47 Reassignment refers to the recording of a transaction arranged by a third party on behalf of others as taking place directly by the two principal parties involved. Many service activities consist of one unit arranging for a transaction to be carried out between two other units in return for a fee from one or both parties to the transaction. In such a case, the transaction is recorded exclusively in the accounts of the two parties engaging in the transaction and not in the accounts of the third party facilitating the transaction. Some service output may be recognized with the facilitator. For example, purchases a commercial agent makes under the orders of, and at the expense of, another party are directly attributed to the latter. The accounts of the agent only show the fee charged to the principal for the facilitation services rendered.
- 4.48 A second example is the collection of taxes by one government unit on behalf of another. The SNA/BPM follows the guidance of the Government Finance Statistics Manual (International Monetary Fund (IMF), 2014), known as GFSM 2014 as follows. In general, a tax is attributed to the government unit that
- exercises the authority to impose the tax (either as a principal or through the delegated authority of the principal), and
 - has final discretion to set and vary the rate of the tax.
- 4.49 Where an amount is collected by one government for and on behalf of another government, and the latter government has the authority to impose the tax, set and vary its rate, then the former is acting as an agent for the latter and the tax is reassigned. Any amount retained by the collecting government as a collection charge should be treated as a payment for a service. Any other amount retained by the collecting government, such as under a tax-sharing arrangement, should be treated as a current grant. If the collecting government was delegated the authority to set and vary the rate, then the amount collected should be treated as tax revenue of this government.
- 4.50 Where different governments jointly and equally set the rate of a tax and jointly and equally decide on the distribution of the proceeds, with no individual government having ultimate overriding authority, then the tax revenues are attributed to each government according to its respective share of the proceeds. If an arrangement allows one government unit to exercise ultimate overriding authority, then all of the tax revenue is attributed to that unit.

- 4.51 There may also be the circumstance where a tax is imposed under the constitutional or other authority of one government, but other governments individually set the tax rate in their jurisdictions. The proceeds of the tax generated in each respective government's jurisdiction are attributed as tax revenues of that government.
- 4.52 Similar principles are applied for the payment of subsidies or social benefits.

Non-monetary transactions

- 4.53 *Non-monetary transactions are transactions that are not initially stated in units of currency.* The entries in the SNA/BPM therefore represent values that are indirectly measured or otherwise estimated. In some cases, the transaction may be an actual one and a value has to be estimated to record it in the accounts. Barter is an obvious example. In other cases, the entire transaction must be constructed and then a value estimated for it. Depreciation is an example.
- 4.54 The amounts of money associated with non-monetary transactions are entries whose economic significance is different from cash payments as they do not represent freely disposable sums of money. The various methods of valuation to be employed for non-monetary transactions are dealt with in the section on valuation in section E.
- 4.55 Non-monetary transactions can be either two-party transactions or actions within an institutional unit. The two-party transactions consist of barter, remuneration in kind, payments in kind other than remuneration in kind and transfers in kind. These two-party transactions are discussed first, followed by a discussion of internal transactions.
- 4.56 Although two-party transactions in kind do exist in practice, in the SNA/BPM they are frequently recorded in the same way as a monetary transaction with an associated expenditure of the item provided in kind. This ensures that there is a change in wealth of the donor without the donor acquiring the product transferred while the recipient acquires the product without any change in wealth. There is further discussion on this in respect of current transfers in chapter 9 (SNA) / chapter 13 (BPM) and of capital transfers in chapter 11 (SNA) / chapter 14 (BPM).

Barter transactions

- 4.57 Barter transactions involve two parties, with one party providing a good, service or asset other than cash to the other in return for a good, service or asset other than cash. As mentioned above, barter is an example of an actual transaction for which a value must be estimated. Barter transactions in which goods are traded for goods have always been important. The barter of goods may be systematically organized on proper markets or, in some countries, may occur only sporadically on a small scale. Barter between nations involving exports and imports also occurs.

Remuneration in kind

- 4.58 Remuneration in kind occurs when an employee accepts payment in the form of goods and services instead of money or another financial asset. This practice is extensive in most economies for reasons ranging from the desire of employers to find captive markets for part of their output, to tax avoidance or evasion. Remuneration in kind takes various forms and the following list includes some of the most common types of goods and services provided without charge, or at reduced prices, by employers to their employees:

- Meals and drinks,
- Housing services or accommodation of a type that can be used by all members of the household to which the employee belongs,
- The services of vehicles provided for the personal use of employees,
- Goods and services produced as outputs from the employer's own processes of production, such as free transport services provided to employees of transport companies.

Further, in addition to goods and services, some employees may be willing, or obliged, to accept part of their remuneration in the form of financial or other assets.

Payments in kind other than remuneration in kind

- 4.59 Payments in kind other than remuneration in kind occur when any of a wide variety of payments is made in the form of goods and services rather than money. For example, a doctor may accept payment in wine instead of money. Or, instead of paying rent or rentals in money, the user of land or fixed capital, respectively, may pay the owner in goods or services. In agriculture, for example, the “rent” may be paid by handing over part of the crops produced to the landlord. (This is known as share cropping.) Tax payments, also, may be paid in kind; for example, inheritance taxes may be paid by making donations of paintings or other valuables.

Transfers in kind

- 4.60 As noted above, transactions in kind are normally recorded in the accounts as if they are monetary transfers followed by the expenditure by the recipient on the products concerned. This treatment applies to government international cooperation, gifts and charitable contributions. Government international cooperation, gifts, and charitable contributions are often made in kind for convenience, efficiency, or tax purposes. For example, international aid after a natural disaster may be more effective and delivered faster if made directly in the form of medicine, food, and shelter instead of money. Charitable contributions in kind sometimes avoid taxes that would be due if the item in question were sold and the money given to the charity.
- 4.61 A special case of transfers in kind is that of social transfers in kind. These consist of goods and services provided by general government and non-profit institutions serving households (NPISHs) that are delivered to individual households. Health and education services are the prime examples. Rather than provide a specified amount of money to be used to purchase medical and educational services, the services are often provided in kind to make sure that the need for the services is met. (Sometimes the recipient purchases the service and is reimbursed by the insurance or assistance scheme. Such a transaction is still treated as being in kind because the recipient is merely acting as the agent of the insurance scheme.)
- 4.62 Social transfers in kind are recorded as an implicit transfer of income from government and NPISHs to households and a transfer of consumption goods and services. The measure of income after the transfer is called disposable income adjusted for social transfers in kind (rather than disposable income) and the measure of consumption is called actual final consumption (rather than final consumption expenditure).

Internal transactions

- 4.63 The SNA treats certain kinds of actions within a unit as transactions to give a more analytically useful picture of final uses of output and of production. These transactions that involve only one unit are called internal, or intra-unit, transactions.
- 4.64 Some households, all NPISHs and general government units, and the central bank operate as both producers and as final consumers. When an institutional unit engages in both activities, it may make the choice to consume some or all of the output itself after the production is completed. In such a case, no transaction takes place between institutional units, but it is useful to construct a transaction and estimate its value to record both output and consumption in the accounts.
- 4.65 For households, the principle in the SNA is that all goods produced by persons that are subsequently used by the same persons, or members of the same households, for purposes of final consumption are to be included in output in a manner analogous to that for goods sold on the market. This means that transactions are assumed in which the persons responsible for the production of the goods are deemed to deliver the goods to themselves as consumers, or members of their own households, and then values have to be associated with them in order to enter them in the accounts. The same holds for the production of services for own final use by households which are considered to be part of the SNA production boundary, owner-occupied housing services being the most important example.
- 4.66 Establishments owned by governments or NPISHs commonly provide education, health, or other kinds of services to individual households, or society at large, without charge or at prices that are not economically significant. The

costs of providing these services are incurred by the governments or NPISHs, and the values are recorded as internal transactions: that is, as final expenditures by governments or NPISHs on outputs produced by establishments they own themselves. The same holds for the central bank. (As already explained, the acquisition of these services by households is recorded separately under social transfers in kind, another form of non-monetary transactions that take place between the government units or NPISHs and the households in question.)

- 4.67 The SNA recognizes several other transactions within enterprises to give a fuller view of production. For example, when enterprises produce fixed assets for their own use, the SNA records deliveries by the enterprises to themselves as the subsequent users. Also, when enterprises use fixed assets (whether own-account or purchased) during production, the SNA charges the decline in the value of the asset during the period of production as a cost.
- 4.68 The recording of deliveries between one establishment and another belonging to the same enterprise is discussed in paragraph 6.104.

Externalities and illegal actions

- 4.69 The sections above describe the kinds of actions that are considered transactions in the SNA/BPM. This section focuses on externalities and illegal actions, explaining why externalities are not considered transactions and distinguishing among kinds of illegal actions that are and are not considered transactions.

Externalities

- 4.70 Certain economic actions carried out by institutional units cause changes in the condition or circumstances of other units without their consent. These are externalities; they can be regarded as unsolicited services, or disservices, delivered without the agreement of the units affected. It is an uncooperative action, usually with undesirable consequences, which is the antithesis of a market transaction.
- 4.71 It is necessary to consider, however, whether values should be assigned to such externalities. Economic accounts have to measure economic functions such as production or consumption in the context of a particular legal and socio-economic system within which relative prices and costs are determined. Further, there would be considerable technical difficulties involved in trying to associate economically meaningful values with externalities when they are intrinsically non-market phenomena. As externalities are not market transactions into which institutional units enter of their own accord, there is no mechanism to ensure that the positive or negative values attached to externalities by the various parties involved would be mutually consistent. Moreover, accounts including values for externalities could not be interpreted as representing equilibrium, or economically sustainable, situations. If such values were to be replaced by actual payments the economic behaviour of the units involved would change, perhaps considerably.
- 4.72 A typical example is the pollution by one producer of the air or water used by other units for purposes of production or consumption. If the producer is allowed to pollute without charge or risk of being penalized, the private costs of production of the polluter will be less than the social costs to the community. Some countries, at least at certain points in their history, may choose to frame their laws so that some producers are permitted to reduce their private costs by polluting with impunity. This may be done deliberately to promote rapid industrialization, for example. The wisdom of such a policy may be highly questionable, especially in the long run, but it does not follow that it is appropriate or analytically useful for economic accounts to try to correct for presumed institutional failures of this kind by attributing costs to producers that society does not choose to recognize. For example, the whole purpose of trying to internalize some externalities by imposing taxes or other charges on the discharge of pollutants is to bring about a change in production methods to reduce pollution. A complete accounting for externalities would be extremely complex as it is not sufficient merely to introduce costs into the accounts of the producers but would also necessitate introducing various other adjustments of questionable economic significance to balance the accounts.
- 4.73 This sort of example illustrates why some analyses are best carried out in the context of an extended account where some of the normal constraints and conventions of the SNA/BPM are relaxed. In the case of pollution, the System of Environmental-Economic Accounting (SEEA) has been developed precisely to explore this issue among other environmental topics.

Illegal actions

- 4.74 Macroeconomic statistics, including national accounts and external accounts, cover all economic phenomena irrespective of whether they are illegal or legal. Illegal actions that fit the characteristics of transactions (notably the characteristic that there is mutual agreement between the parties) are therefore treated the same way as legal actions. The production or consumption, including exports and imports, of certain goods or services, such as narcotics, may be illegal but market transactions in such goods and services have to be recorded in the accounts. It is important to note that the differences in the definition of illegal transactions between economies or within an economy over time would cause inconsistencies in the national/external accounts if illegal transactions were omitted. Furthermore, illegal transactions generally affect other legal transactions (e.g., certain legal financial assets may be purchased with income generated through illegal transactions). If expenditures on illegal goods or services by households were to be ignored on grounds of principle, household saving would be overestimated and households presumed to obtain assets that they do not in fact acquire. Similarly, if exports and imports of illegal goods and services were to be ignored, the external balance on goods and services would be misrepresented. Clearly, the accounts as a whole are liable to be seriously distorted if monetary transactions that in fact take place are excluded. It may be difficult to obtain high-quality estimates about illegal transactions, but in principle they should be included in the accounts if only to reduce error in other items, including balancing items.
- 4.75 However, many illegal actions are crimes against persons or property that in no sense can be construed as transactions. For example, theft can scarcely be described as an action into which two units enter by mutual agreement. Conceptually, theft or violence is an extreme form of externality in which damage is inflicted on another institutional unit deliberately and not merely accidentally or casually. Thus, thefts of goods from households, for example, are not treated as transactions and estimated values are not recorded for them under household expenditures.
- 4.76 If thefts, or acts of violence (including war), involve significant redistributions, or destructions, of assets, it is necessary to take them into account. As explained below, they are treated as other flows, not as transactions.

**2. Other flows**

- 4.77 Other flows are changes in the value of assets and liabilities that do not result from transactions. The reason that these flows are not transactions is linked to their not meeting one or more of the characteristics of transactions. For example, the institutional units involved may not be acting by mutual agreement, as with an uncompensated seizure of assets. Or the change may be due to a natural event such as an earthquake rather than a purely economic phenomenon. Alternatively the value of an asset expressed in foreign currency may change as a result of an exchange rate change. In the context of external accounts, other flows are recorded only for financial assets and liabilities that represent claims on and liabilities to non-residents and gold bullion, because the IIP relates only to external financial assets and liabilities.
- 4.78 The entries for other flows appear in one of the two accounts that comprise the other changes in assets and liabilities accounts. The other changes in the volume of assets and liabilities account includes changes that lead to a change in value of an asset because of a change in the quantity or physical characteristics of the asset in question. The revaluation account includes changes in the value of assets, liabilities, and net worth due to only changes in the level and structure of prices, which are reflected in holding gains and losses.

Other changes in the volume of assets and liabilities

- 4.79 Other changes in the volume of assets and liabilities fall into three main categories.
- 4.80 The first category relates to the appearance and disappearance of assets and liabilities other than by transactions. Some of these may relate to naturally occurring assets, such as subsoil resources, so that the entrances and exits come about as interactions between institutional units and nature. Others relate to assets created by human activity, such as valuables. For valuables, for example, the capital account records their acquisition as newly produced goods or imports in transactions, and it records transactions in existing goods already classified as valuables. It is the recognition of a significant or special value for goods not already recorded in the balance sheets that is considered an economic appearance to be recorded as an other flow. These valuables may not be in the balance sheets for any of several reasons. For example, they may antedate the accounts or were originally recorded as consumption goods.

- 4.81 Write-offs of claims by creditors, as well as monetization and demonetization of gold bullion, also typically feature under this first category. However, if debt forgiveness is provided, such as in a non-commercial setting, transactions are recorded. In the case of debt cancellations, it may sometimes be unclear whether they should be classified as transactions or other flows. In commercial settings, in the absence of specific information, debt cancellation can be treated as other changes in the volume of assets and liabilities. On the other hand, assumption of debts arising from the activation of guarantees and rescheduling of debts is typically the result of a mutual agreement between the parties involved, and, hence, should be classified as transactions. (See [chapter 13 \(SNA\) / chapter 9 \(BPM\)](#) for more details.)
- 4.82 A final example of the first category relates to the creation of crypto assets without a corresponding liability designed to act as a general medium of exchange, or designed to act as a medium of exchange within a platform or network only. These are treated as non-produced non-financial assets, whose creation is to be recorded as an other change in the volume of assets. See [chapter 22 \(SNA\) / chapter 17 \(BPM\)](#) for more information on the recording and classification of crypto assets.
- 4.83 The second category relates to the effects of externalities and disasters. One such event is one institutional unit's effectively removing an asset from its owner without the owner's agreement, an action that is not considered a transaction because the element of mutual agreement is absent. These events also include those that destroy assets, such as natural disaster or war. In contrast, transactions, such as depreciation or change in inventories, refer to normal rates of loss or damage.
- 4.84 The third category relates to changes in assets and liabilities that reflect changes in the classification of institutional units among sectors and in the structure of institutional units, or in the classification of assets and liabilities. For example, if an unincorporated enterprise becomes more financially distinct from its owner and takes on the characteristics of a quasi-corporation, it and the assets and liabilities it holds move from the household sector to the non-financial corporations sector and changes in the sector allocation of the assets and liabilities owned by the quasi-corporation are recorded under this heading.
- 4.85 Finally, changes in the status of existing financial claims and liabilities arising from the change in residence of individuals from one economy to another are treated as other changes in the volume of assets and liabilities. These flows result from a change in the classification of the owner's residence status, and hence, they should not be classified as transactions (See also [paragraphs 9.xx to 9.xx \(BPM\)](#).)

Revaluations (holding gains and losses)

- 4.86 Positive or negative nominal holding gains accrue during the accounting period to the owners of assets and liabilities as a result of a change in their prices. Holding gains are sometimes described as "capital gains", but "holding gain" is preferred here because it emphasizes that holding gains accrue purely as a result of holding assets or liabilities over time without transforming them in any way. Holding gains include not only gains on "capital" such as fixed assets, land and financial assets but also gains on inventories of all kinds of goods held by producers, including work-in-progress. Holding gains may accrue on assets held for any length of time during the accounting period, not only on assets held throughout the period and may thus appear for assets appearing on neither the opening nor closing balance sheet. In external accounts, revaluations are further classified into those that are due to exchange rate changes and those that are due to other price changes.
- 4.87 Nominal holding gains depend upon changes in the prices of assets and liabilities over time. The prices in question are the prices at which the assets may be sold on the market. Nominal holding gains may be further decomposed into neutral holding gains, which reflect changes in the general price level, and real holding gains which reflect changes in the relative prices of assets.

C. Stocks

- 4.88 Stocks, which in the case of financial assets and liabilities are also often referred to as positions, relate to the level of assets or liabilities at a point of time. In order to discuss stocks, it is necessary to define assets and liabilities, and these definitions depend crucially on the concepts of benefits and ownership. Once the definitions are clear, the way

in which assets and liabilities are classified within a balance sheet are touched on as well as the way in which items enter and leave the balance sheet.

1. Benefits

4.89 The heart of the SNA describes how labour, and non-financial assets, including land and other natural resources, are used to produce goods and services. These goods and services are used for the three economic activities recognized in the SNA, production, consumption and accumulation. An economic benefit is defined as denoting a gain or positive utility arising from an action. It implies a comparison between two states. This can be elaborated within the SNA so that benefits are seen as rewards for providing services, such as those of labour and capital to production and also the means of acquiring goods and services for production, consumption or accumulation in the current period or in future periods.

4.90 Sometimes the immediate benefit is in terms of goods and services directly, for example own account production or wages and salaries in kind. More often a benefit is in the form of the medium of exchange (money), for example as wages and salaries. Consumption is an activity that takes place in the current period only but may be financed from past benefits. Production and accumulation also involve benefits postponed to future periods. Thus, means of allowing benefits to be moved from one accounting period to another have to be recognized. These take the form of assets and liabilities where a benefit in one period is converted to a benefit in one or more future periods. Similarly goods and services, or current benefits, may be acquired by committing future benefits in the form of (financial) liabilities.

2. Ownership

4.91 Two types of ownership can be distinguished, legal ownership and economic ownership. *The legal owner refers to the institutional unit entitled in law and sustainable under the law to claim the benefits associated with goods, services, natural resources, financial assets or liabilities (which may be different from the economic owner).*

4.92 Sometimes government may claim legal ownership of an item on behalf of the community at large. No item that does not have a legal owner that can claim the associated benefits, either on an individual or collective basis, is recognized in macroeconomic statistics.

4.93 The acts of production, consumption and accumulation involve varying degrees of risk. Two main forms of risk can be identified. The first sort refers to production. These arise because of such uncertainties as the demand for goods and services once produced, developments in the economy in general and technical innovation that affects the benefits to be earned from non-financial assets. The consequence is that benefits from non-financial assets and labour in the form of operating surplus and income from employment are not wholly predictable in advance, but embody a degree of risk.

4.94 The second type of risk refers to the process of transferring benefits between time periods. It arises because of uncertainty over interest rates and other financial developments in future periods, which in turn affects the comparative performance of different types of benefits.

4.95 When economic agents make decisions about consumption or accumulation, they have to make a judgement about the relative advantages of benefits being converted to goods and services in the current period as against conversion in a later period. Thus all economic activity involves both benefits and risks. Transferring benefits between time periods inevitably involves transferring risks also. An agent may opt for a lower but more certain benefit in future rather than a benefit that might be higher but is less certain. Of particular interest is the case when an agent swaps benefits and risks associated with production with those associated with financial assets and liabilities.

4.96 *The economic owner refers to the institutional unit entitled to claim the benefits associated with the use of goods, services, natural resources, financial assets in the course of an economic activity by accepting the associated risks.*

- 4.97 Every item has both a legal owner and an economic owner, though in many cases the economic owner and the legal owner of an item are the same. Where they are not, the legal owner has handed responsibility for the risk involved in using the item in an economic activity to the economic owner along with associated benefits. In return the legal owner accepts another package of risks and benefits from the economic owner. In general within the SNA/BPM, when the expression “ownership” or “owner” is used and the legal and economic owners are different, the reference should be understood to be to the economic owner. Chapter 27 on contracts, leases, licences and permits, discusses a number of cases where legal and economic ownership are different.
- 4.98 When government claims legal ownership of an item on behalf of the community at large, the benefits also accrue to the government on behalf of the community at large. Thus government is both the legal and economic owner of these items.
- 4.99 Especially in relation to natural resources, a government is typically the legal owner and grants rights or permissions to exploit the resources to another institutional unit. In such cases, the benefits may be shared between the government and the exploiter of the resources, and the economic ownership of the resources is split between the two entities involved, in line with the shares each entity appropriates.
- 4.100 In the case of multinational enterprise groups, the economic ownership of intellectual property products may be difficult to determine. Various arrangements, including the routing via special purpose entities, exist. The use of a special decision tree is recommended for the appropriate allocation and recording of these assets across the MNE. See chapter 23 (SNA) / chapter 15 (BPM) for more information.
- 4.101 The benefits inherent in financial assets and liabilities are seldom transferred from a legal owner to an economic owner in exactly the same state. They are usually transformed to new forms of financial assets and liabilities by the intermediation of a financial institution that assumes some of the risk and benefits while passing the balance on to other units.

3. The definition of an asset

- 4.102 Leading on from the above it is possible to define an asset as follows. *An asset is a store of value representing a benefit or series of benefits accruing to the economic owner by holding or using the item over a period of time. It is a means of carrying forward value from one accounting period to another.*
- 4.103 All assets in the SNA/BPM are economic assets. Attributes such as skills, which are sometimes described in common parlance as an asset, are not recognized as such in the SNA/BPM because they do not meet the criteria of an asset, as defined in the above paragraph.

4. Types of assets and liabilities

- 4.104 A particularly important mechanism in the economy is the device whereby one economic unit exchanges a particular set of benefits with another economic unit. Benefits are exchanged by means of payments. From this a financial claim, and hence a liability, can be defined. There are no non-financial liabilities recognized in the SNA, thus the term liability necessarily refers to a liability that is financial in nature.
- 4.105 *A liability is established when one unit (the debtor) is obliged, under specific circumstances, to provide a payment or series of payments to another unit (the creditor).* The most common circumstance in which a liability is established is a legally binding contract that specifies the terms and conditions of the payment(s) to be made and payment according to the contract is unconditional.
- 4.106 In addition, a liability may be established not by contract but by long and well-recognized custom that is not easily refuted. In these cases, the creditor has a valid expectation of payment, despite the lack of a legally binding contract. Such liabilities are called constructive liabilities. An example relates to pensions provided by government as part

of a social security scheme. In the context of the SNA/BPM, they are generally not recognized as being part of liabilities.

- 4.107 Whenever a liability exists, there is a corresponding financial claim that the creditor has against the debtor. ***Financial claims are financial instruments that give rise to an economic asset that has a counterpart liability, including shares and other equity in corporations.*** As such, a financial claim gives rise to the payment or series of payments due to the creditor by the debtor under the terms of a liability. Like the liabilities, the claims are unconditional. In addition, a financial claim may exist that entitles the creditor to demand payment from the debtor but whereas the payment by the debtor is unconditional if demanded, the demand itself is discretionary on the part of the creditor. Specific guidance on the recognition and the recording of pension entitlements and various types of insurance technical reserves is provided in chapter 12 and 24.
- 4.108 ***Financial assets consist of all financial claims, including shares or other equity in corporations, plus gold bullion held by monetary authorities as a reserve asset.*** Gold bullion held by monetary authorities as a reserve asset is treated as a financial asset (see paragraphs 6.xx-xx, BPM7 for the definition of reserve assets) even though the holders have no claim over other designated units. Shares are treated as financial assets even though the financial claim their holders have on the corporation is not a fixed or predetermined monetary amount.
- 4.109 The IIP covers financial assets and liabilities that have an external character. All financial claims involve two parties, so they have an external character if the claim is on a non-resident. Similarly, all liabilities involve two parties, so they have an international character if the obligation is to a non-resident. The gold bullion component of monetary gold is the only case of a financial asset with no counterpart liability; its external character arises from the historical role of gold in the international financial system. IIP is described in **chapter 7 (BPM).**
- 4.110 All items that meet the definition of an asset given above are included in the asset boundary of the SNA/BPM. Assets that are not financial assets are non-financial assets. In the case of non-financial assets, a distinction can be made between those that are produced and those that are non-produced. In the SNA/BPM balance sheet classification, a similar distinction has been applied, although natural resources, both produced and non-produced, have been grouped together to emphasize the special character of this group of non-financial assets.

5. The asset boundary

- 4.111 Because assets represent a store of future benefits, all assets can be represented by a monetary value. This value represents the market's view of the total benefits embodied by the asset. Where a direct market view of this value is not available, it must be approximated by other means. There is a discussion of this topic in the annex to this chapter.
- 4.112 The only non-financial assets included in the asset boundary of an economy are those whose economic owners are resident in the economy. However, in the case of most natural resources and immobile fixed capital, which physically cannot leave the economy, a notional resident unit is established if the economic owner is actually a non-resident unit. In this way the assets in question do become those with resident economic owners and so are included within the asset boundary and are included on the balance sheet of the domestic economy. Portable non-financial assets that are physically located in an economy but are owned by non-residents are excluded from the balance sheet of the domestic economy; those that are physically located in the rest of the world but owned by residents are included in the asset boundary. For example, planes belonging to a domestic airline are always assets of the domestic economy regardless of where in the world they happen to be. As noted in **paragraph 4.93 (SNA) / paragraph 3.93 (BPM)**, the ownership of intellectual property products, especially within multinational enterprise groups, may be difficult to determine; more guidance is provided in **chapter 23 (SNA) / chapter 15 (BPM).**

Contingent liabilities and provisions

- 4.113 A liability, as defined in **paragraph 4.105** above, is unconditional once the contract establishing the liability is agreed by both parties. If the liability is established not by a legal contract but by long and well-established custom, it is referred to as a constructive liability. Some liabilities may involve a legal contract but specify that one party is obliged to provide a payment or series of payments to another unit only if certain specified conditions prevail. Such liabilities are called contingent liabilities. In general, the SNA/BPM includes (legal) liabilities but not constructive and contingent liabilities. An exception is made for standardized guarantees where, although each individual

arrangement involves a contingent liability, the number of similar guarantees is such that an actual liability is established for the proportion of guarantees likely to be called.

- 4.114 A corporation may set aside funds to cover, for example, unexpected events, default by their customers, or terminal costs related to the disposal of an asset. Such monies may be described as provisions. These are not treated as liabilities in the SNA/BPM, because they are not the subject of the sort of (legal) contract associated with a liability. Though financial institutions may regularly write off bad debts, for example, it would not be appropriate to regard the provisions set aside for this as assets of the borrowers. Even though they may be earmarked for specific purposes, the amounts designated as provisions remain part of the net worth of the corporation. Provisions are thus a designation of the purpose for which funds may be used rather than a category of financial assets and liabilities in and of themselves. More information on the treatment of provisions is provided in chapter 14 (SNA).

6. Entry and exit of assets from the balance sheet

- 4.115 All assets owned by (notional) resident units appear on the balance sheet of the domestic economy. The first level of classification of assets distinguishes four types of assets: produced non-financial assets (excluding produced natural capital); non-produced non-financial assets (excluding non-produced natural capital); natural capital, and financial assets (and liabilities). In view of arriving at an improved accounting for the role of the environment in economic developments, natural capital is separately identified, grouping together both produced and non-produced natural resources. For the other assets, the breakdown makes clear the difference in the process by which assets enter and leave the balance sheet.
- 4.116 Produced non-financial assets come into being via the production process or as imports. The same holds for produced natural capital, such as cultivated biological resources. Two exceptions exist. Historical monuments are included as produced assets even though they may have been constructed long before economic accounts existed. Occasionally a monument may be newly recognized as having value and thus enter the asset boundary as a produced asset other than through a current production process. Similar arguments apply to artefacts treated as valuables. Produced non-financial assets leave the asset boundary by being exhausted or by being sold to resident units that will not continue to use the asset in production as a source of future benefits or by being sold to non-resident units.
- 4.117 Non-produced non-financial assets, excluding non-produced natural capital, are of three types; contracts, leases and licences; crypto assets without a corresponding liability designed to act as a medium of exchange; and purchased goodwill and marketing assets. Contracts, leases and licences may represent an asset to the holder when the agreement restricts the general use or supply of products covered by the agreement and thus enhances the benefits accruing to the party to the agreement beyond what would accrue in the case of unrestricted supply. These assets come into existence when the agreement is made and the enhanced benefits become apparent. They leave the balance sheet when the conditions restricting access are lifted or when there is no longer a benefit to be earned from having restricted access to the asset. Crypto assets without a corresponding liability designed to act as a medium of exchange are considered as non-produced assets, because the miners solving cryptographic puzzles, and (partly) receiving crypto assets in return, are considered to be producers of validation services, not as producers of the assets themselves. Goodwill and marketing assets are only recognized as assets in the SNA when they are evidenced by a sale.
- 4.118 Financial assets and liabilities come into being when a commitment is made by one unit to make a payment to another unit. They cease to exist when there is no longer a commitment for one unit to make payments to the other. This may be because the term of the agreement specified in the commitment has expired or for other reasons.

7. Exclusions from the asset boundary

- 4.119 The coverage of assets in the integrated framework of national accounts is limited to those assets used in economic activity and that are subject to ownership rights, either individually or collectively; thus for example, natural resources that are not owned, are excluded.
- 4.120 Consumer durables are not regarded as assets in the integrated framework of national accounts, because the services they provide are not within the production boundary. Because the information on the stock of durables is of analytical interest, though, it is suggested that this information appear as a supplementary item in the balance sheet but not be integrated into the totals of the table.

- 4.121 Human capital is also not treated by the as an asset in the integrated framework of national accounts; see paragraphs 1.77 and 1.78. However, as explained in chapter 35, it is encouraged to compile extended accounts on education and training, including experimental estimates of the value of human capital.
- 4.122 Some environmental resources are excluded from the asset boundary in the integrated framework of national accounts. These are usually of the same type as those within the boundary but are of no economic value.

D. Balancing items

- 4.123 A balancing item is an accounting construct obtained by subtracting the total value of the entries on one side of an account from the total value for the other side. It cannot be measured independently of the other entries; as a derived entry, it reflects the application of the general accounting rules to the specific entries on the two sides of the account. It does not relate to any specific set of transactions, or any set of assets, and so it cannot be expressed in terms of its own price or quantity units.

Balancing items in the flow accounts

- 4.124 Balancing items are not simply devices introduced to ensure that accounts balance. They are often used as key macroeconomic indicators to assess economic performance. They encapsulate a great deal of information and include some of the most important entries in the accounts, as can be seen by the examples of balancing items in the national accounts for the accounts containing flows reproduced below:
- Value added or domestic product,
 - Operating surplus,
 - Disposable income,
 - Saving,
 - Net lending / net borrowing.
- 4.125 In the external accounts, some important measures derived as balances for the accounts containing flows are as follows:
- Balance on trade in goods,
 - Balance on trade in services,
 - Balance on goods and services,
 - Balance on goods, services, and earned income,
 - Current account balance,
 - Net lending /net borrowing
 - from current and capital accounts
 - from financial account
 - Changes in net IIP arising from other flows (in total, and for each of other changes in volume, exchange rate changes, and other price changes)

Balancing items in the balance sheets

- 4.126 Net worth, which is defined as the value of all the non-financial and financial assets owned by an institutional unit or sector less the value of all its outstanding liabilities, is the balancing item in the balance sheets. As is true for other balancing items in the SNA, net worth cannot be measured independently of the other entries, nor does it relate to any specific set of transactions.
- 4.127 As well as net worth appearing as a stock level, changes in net worth due to different sorts of transactions and other flows may also be derived. Just as the changes in the levels of any asset can be traced through changes in transactions and other flows throughout the period, so changes in total net worth can be exhaustively described according to the transactions and other flows that led to changes in the total level of assets and liabilities.
- 4.128 In the external accounts, the main balancing item derived from stocks is the net IIP, which represents the total external financial assets minus total external liabilities.
- 4.129 This list is not comprehensive; other balancing items can be derived as needed for analysis. For example, balances on components in the financial account may be of interest, such as net direct investment or net portfolio investments.

E. Accounting rules

- 4.130 This section covers the quadruple entry accounting principle, valuation, time of recording, classification of accounting entries and grouping of transactions. The application of each of these to the individual flows and stocks is explained in detail in the chapters that describe the entries in the various tables and accounts of the sequence of economic accounts/balance of payments and IIP. The details on classifications of accounting entries are discussed, account by account, in chapters 7 to 14 (SNA) / 7 to 14 (BPM).

1. Quadruple-entry accounting

- 4.131 The accounting system underlying the SNA/BPM derives from broad bookkeeping principles. To understand the accounting system for the SNA/BPM, three bookkeeping principles can be distinguished:
1. Vertical double-entry bookkeeping, also known as simply double-entry bookkeeping used in business accounting,
 2. Horizontal double-entry bookkeeping, and
 3. Quadruple-entry bookkeeping.

Vertical double-entry bookkeeping – corresponding entries

- 4.132 The main characteristic of vertical double-entry bookkeeping is that each transaction leads to at least two entries, traditionally referred to as a credit entry and a debit entry, in the books of the transactor. This principle ensures that the total of all credit entries and that of all debit entries for all transactions are equal, thus permitting a check on consistency of accounts for a single unit. Each transaction requires two entries. The external accounts for an economy are to be compiled on a vertical-double entry bookkeeping basis from the perspective of the residents of that economy.
- 4.133 Other flows have their counterpart entries directly in changes in net worth. As a result, vertical double-entry bookkeeping ensures the fundamental identity of a unit's balance sheet, that is, the total value of assets equals the total value of liabilities plus net worth. The total value of the assets owned by an entity minus the total value of liabilities provides net worth. In the external accounts, net IIP provides a measure of net financial claims with non-residents plus gold bullion held as monetary gold. These terms are discussed in paragraphs 7.xx (BPM).

Horizontal double-entry bookkeeping – counterpart entries

- 4.134 The concept of horizontal double-entry bookkeeping is useful for compiling accounts that reflect the mutual economic relationships between different institutional units in a consistent way. It implies that if unit A provides something to unit B, the accounts of both A and B show the transaction for the same amount: as a payment in A's account and as a receipt in B's account. Horizontal double-entry bookkeeping ensures the consistency of recording for each transaction category by counterparties. For example, dividends payable throughout the economy should be equal to dividends receivable throughout the economy once transactions with the rest of the world are taken into account. While the horizontal double entry applies to the national accounts of a particular country, similar principles apply to external accounts at a worldwide level: for example, at the worldwide level, dividends payable by all economies should be equal to dividends receivable by all economies.

Quadruple-entry bookkeeping

- 4.135 The simultaneous application of both the vertical and horizontal double-entry bookkeeping results in a quadruple-entry bookkeeping, which is the accounting system underlying the recording in the national accounts and external accounts. Additionally, definitions, classifications, and accounting principles in the external accounts are derived from the viewpoint of conceptual symmetry as well as symmetric reporting by partner economies. The quadruple-entry system deals in a coherent way with multiple transactors or groups of transactors, each of which satisfies vertical double-entry bookkeeping requirements. A single transaction between two counterparties thus gives rise to four entries. In contrast to business bookkeeping, national accounts and external accounts deal with interactions among a multitude of units in parallel, and thus require special care from a consistency point of view. As a liability of one unit is mirrored in a financial asset of another unit, for instance, they should be identically valued, allocated in time and classified to avoid inconsistencies in aggregating balance sheets of units (by sectors or for the total economy in the case of national accounts, or regional or global totals in the case of external accounts). The same is also true for all transactions and other flows that affect balance sheets of two counterparties.

Types of accounting entries – SNA

- 4.136 The SNA uses the following conventions and terminologies for recording flows with the rest of the world. Imports, for instance, are a revenue of the rest of the world used in the domestic economy and payments for imports represent a drawdown of wealth for the domestic economy but a revenue for the rest of the world. By treating the rest of the world account as a pseudo-sector, the quadruple entry accounting principle can be applied and all stocks and flows within the economy and with the rest of the world are completely balanced. The external accounts show the consolidated accounts of all domestic sectors relative to the rest of the world. It is thus an exact mirror image of the accounts for the rest of the world within the SNA. However, despite the reversal of the sides of the accounts on which items are shown, there is equality in coverage, measurement and classification between the two systems.



- 4.137 More generally, in the national accounts, credit entries in the accounts representing current transactions are denoted as revenues, while debit entries are referred to as expenditures. In the case of transactions in assets and liabilities, including capital transfers, reference is made to changes in assets and changes in liabilities (and net worth). The same holds for the accounts which reflect flows affecting the level of assets and liabilities other than transactions. The two sides of balance sheets are referred to as assets, and liabilities and net worth, respectively.

Types of accounting entries – BPM

- 4.138 The external accounts use the following conventions and terminologies for recording flows. In the current and capital accounts, a credit/revenue denotes entries from exports, earned income receivable, transfers receivable, and disposals of non-produced non-financial assets. A debit/expenditure is used to record entries for imports, earned income payable, transfers payable, and acquisitions of non-produced nonfinancial assets.
- 4.139 In the case of transactions in financial assets and liabilities, the terms “net acquisition of financial assets” and “net incurrence of liabilities” are used. Financial account items are recorded on a net basis separately for each financial asset and liability (i.e., they reflect changes due to all credit and debit entries during an accounting period). The use of the terms “net acquisition of financial assets” and “net incurrence of liabilities” highlights the impact of the financial account on the IIP. The use of these terms also simplifies the interpretation of data. A positive change indicates an increase in assets or liabilities and a negative change indicates a decrease in assets or liabilities. The interpretation of increase or decrease under the credit or debit notion, however, depends on whether the increase or decrease refers to assets or liabilities (a debit for an asset is an increase; a debit for a liability is a decrease). Although

the debit and credit presentation is not emphasized for the financial account transactions, it is important to recognize and maintain the accounting identities. For example, a credit is always conceptually matched with a corresponding debit, the latter relating to either an increase in an asset or a reduction in a liability (see Box 2.1, BPM7). The conventions for aggregation, consolidation, and netting assets against liabilities are described in Section F.

2. Valuation



General rules

- 4.140 The power of the SNA and the BOP/IIP as analytical tools stem largely from their ability to link numerous, very varied economic phenomena by expressing them in a single accounting unit. The SNA and the BOP/IIP do not attempt to determine the utility of the flows and stocks that come within their scope. Rather, they measure the current exchange value of the entries in the accounts in monetary terms.
- 4.141 In line with the above, market prices refer to the current exchange value, that is, the values at which goods, services, labour or assets are exchanged, or else could be exchanged, for cash (currency or transferable deposits). Market prices are the basis for valuation of transactions in the SNA/BPM. This section describes the general principles for valuation of flows and positions.

Valuation of transactions

- 4.142 Market prices for transactions are defined as amounts of money that willing buyers pay to acquire something from willing sellers; the exchanges are made between independent parties and on the basis of commercial considerations only, sometimes called “at arm’s length.” Thus, according to this strict definition, a market price refers only to the price for one specific exchange under the stated conditions. A second exchange of an identical unit, even under circumstances that are almost exactly the same, could result in a different market price. A market price defined in this way is to be clearly distinguished from a price quoted in the market, a world market price, a going price, a fair market price, or any price that is intended to express the generality of prices for a class of supposedly identical exchanges rather than a price actually applying to a specific exchange. Furthermore, a market price should not necessarily be construed as equivalent to a free market price; that is, a market transaction should not be interpreted as occurring exclusively in a purely competitive market situation. In fact, a market transaction could take place in a monopolistic, monopsonistic, or any other market structure. Indeed, the market may be so narrow that it consists of the sole transaction of its kind between independent parties.
- 4.143 When a price is agreed by both parties in advance of a transaction taking place, this agreed, or contractual, price is the market price for that transaction regardless of the prices that prevail when the transaction takes place.
- 4.144 Observed exchange values in most cases will represent market prices as described in the preceding paragraph. Paragraphs 4.147 to 4.151 describe cases where actual exchange values may not represent market prices. Transactions that involve dumping and discounting represent market prices. Transaction prices for goods and services are inclusive of appropriate taxes and subsidies. A market price is the price payable by the buyer after taking into account any rebates, refunds, adjustments, etc. from the seller.
- 4.145 Transactions in financial assets and liabilities are recorded at the prices at which they are acquired or disposed of. Transactions in financial assets and liabilities should be recorded exclusive of any commissions, fees, and taxes whether charged explicitly, included in the purchaser’s price, or deducted from the seller’s proceeds. This is because both debtors and creditors should record the same amount for the same financial instrument. The commissions, fees, and taxes should be recorded separately from the transaction in the financial asset and liability, under appropriate categories. The valuation of financial instruments, which excludes commission charges (to be recorded as transactions in services), differs from the valuation of non-financial assets, which includes any costs of ownership transfer.
- 4.146 When market prices for transactions are not observable, valuation according to market-price-equivalents provides an approximation to market prices. In such cases, market prices of the same or similar items when such prices exist will provide a good basis for applying the principle of market prices. Generally, market prices should be taken from the markets where the same or similar items are traded currently in sufficient numbers and in similar circumstances. If there is no appropriate market in which a particular good or service is currently traded, the valuation of a

transaction involving that good or service may be derived from the market prices of similar goods and services by making adjustments for quality and other differences.

- 4.147 If there is no appropriate market from which the value of a particular item can be taken by analogy, its valuation may be derived from prices that are established in less closely related markets. Ultimately, some goods and services can only be valued by the amount that it would cost to produce them currently. Output valued in this way should include a mark-up that reflects the return to capital used in the production of the relevant goods and services.
- 4.148 More details on the methods for valuing transactions are provided in the annex to this chapter, while the valuation of specific types of flows is discussed in further detail in relevant chapters.

Agricultural products sold from the farm

- 4.149 A significant qualification to the use of market-equivalent prices is necessary in the case of agricultural products sold directly from the farm. The so-called farm-gate price may be significantly lower than a price in the nearest market where prices can be observed since the latter include the costs of bringing the goods to market. Further, if only a small fraction of a crop gets to the market, it may command a higher price than would be the case if all the available crop were traded. Such considerations are to be understood by the qualification that observed market prices are appropriate only when similar products are traded in sufficient number and in similar circumstances. When these conditions do not hold, adjustments must be made to the observed prices.

Barter

- 4.150 The case of barter requires specific consideration. The products bartered must be valued when produced as well as when acquired for consumption or for capital formation. While it may often be the case that for small scale barter transactions entered into by the producer, there are no taxes on products payable (or if they are nominally payable the conditions of the barter means they are avoided and not paid), there is no automatic exclusion of bartered products from liability to taxes on products. Subsidies on bartered products are possible conceptually but unlikely to be significant. By the nature of barter, there are no wholesale or retail margins applicable to bartered products. Goods subject to barter may, however, have associated transportation costs. If the unit providing the goods for barter also provides the transport, this will, in general, mean that the barter “package” includes some transportation services and the value to the recipient will be a purchaser’s price including this transportation cost. If the unit receiving the goods must provide the transport, this may reduce the valuation of the goods to the recipient.
- 4.151 Barter transactions may concern new or existing goods acquired by one party to the barter in which case the value to that party will be the cost of acquisition (in the case of new goods) or the realizable value in the case of existing goods.
- 4.152 Barter transactions necessarily involve two units and (at least) two products. Each unit may place a different value on either item being bartered. In such a case, since the accounting rules of the SNA/BPM require a single value to be recorded for both parties, on pragmatic grounds a simple average of the different valuations (after allowing for any taxes and transportation costs) may be taken as the value of the transaction.

- 4.153 Barter transactions do not always take place simultaneously. When this is not the case, an account receivable/payable should be recorded even though neither part of the barter transaction takes place in monetary terms.

Quotation prices

- 4.154 Market valuation also poses problems for transactions in goods in which the contracts establish a quotation period often months after the goods have changed hands. In such cases, the exchange value at the time of change of ownership should be estimated. The estimate should be revised with the observed exchange value, when known. The exchange value is given by the contract price even if it is unknown at the time of change of ownership.

Valuation of transfers in kind

- 4.155 When non-financial resources are provided without a quid pro quo, such resources should be valued at the prices that would have been received if the resources had been sold in the market. In the absence of an observable market price, the donor's view of the imputed value of the transaction will often be quite different from that of the recipient. The suggested rule of thumb is to use the value assigned by the donor as a basis for recording.

Acquisition of goods under financial lease

- 4.156 Acquisition of goods under financial lease should be valued at market prices at the time of acquisition, if such prices are available. When no price is determined, it may be necessary to use the estimated written-down current acquisition values of fixed assets or the present value of expected future returns.

Transfer pricing

- 4.157 In some cases observed exchange values may not represent market prices. Examples are transactions involving transfer prices between affiliated enterprises, manipulative agreements with third parties, and certain non-commercial transactions, including concessional interest (that is, interest payable at a reduced rate as a matter of policy). Prices may be under- or over-invoiced, in which case an assessment of a market-equivalent price needs to be made. Although adjustment should be made when the observed exchange values do not represent market prices, this may not be practical in many cases. Adjusting the actual exchange values to reflect market prices will have consequences in other accounts. Therefore, when such adjustments are made, corresponding adjustments in other accounts should also be made, for example, if prices of goods are adjusted, associated income account or financial account transactions or both should also be adjusted. Moreover, the adjustments need to be made consistently in the accounts of both units involved in the transaction. This may be difficult to apply in practice in the case the relevant units are resident in different countries, and the statistical offices responsible for making the adjustments represent different countries as well.
- 4.158 Values put on an invoice may deviate systematically or to such a large extent from the prices paid in the market for similar items that it must be presumed that the sums paid cover more than the specified transactions. An example is so-called transfer pricing: affiliated enterprises may set the prices of the transactions among themselves artificially high or low in order to effect an unspecified income payment or capital transfer. Such transactions should preferably be made explicit if their value is considerable and would hinder a proper interpretation of the accounts. In some cases, transfer pricing may be motivated by income distribution or equity build-ups or withdrawals. Replacing book values (transfer prices) with market-value equivalents is desirable in principle, when the distortions are large and when availability of data (such as adjustments by customs or tax officials or from partner economies) makes it feasible to do so. Selection of the best market-value equivalents to replace book values is an exercise calling for cautious and informed judgment.
- 4.159 The exchange of goods between affiliated enterprises may often be one that does not occur between independent parties (for example, specialized components that are usable only when incorporated in a finished product). Similarly, the exchange of services, such as management services and technical know-how, may have no near equivalents in the types of transactions in services that usually take place between independent parties. Thus, for transactions between affiliated parties, the determination of values comparable to market values may be difficult, and compilers may have no choice other than to accept valuations based on explicit costs incurred in production or any other values assigned by the enterprise. The valuation of management fees and other similar cases in the case of balance of payments is elaborated in paragraph 11.xx, *BPM7*.
- 4.160 All in all, because of all the complexities involved to arrive at a consistent recording of the adjustments, not to mention the availability of relevant information on the distortions in the observed exchange values, national accounts and external accounts often refrain from trying to approximate true market prices. Here, one can also add that the observed exchange values, which may be motivated by global tax avoidance or other reasons, also represent an economic reality of its own, albeit not one which is based on market prices and other commercial considerations.

Concessional pricing

- 4.161 While some non-commercial transactions, such as a grant in kind, have no market price, other non-commercial transactions may take place at implied prices that include some element of grant or concession so that those prices also are not market prices. Examples of such transactions could include negotiated exchanges of goods between

governments and government loans bearing lower interest rates than those with similar grace and repayment periods or other terms for purely commercial loans. Concessional lending by governments is described in chapter 30 (SNA). Other examples of concessional lending may relate to the provision of loans at reduced interest rates by employers to their employees. In the sequence of economic accounts/external accounts, adjustments for concessional lending are restricted to the latter; the provision of adjusted information on concessional lending in a non-market context by governments, central banks and international organizations is encouraged as supplementary items. See paragraphs 14.xxx (SNA / paragraphs 13.51 and 14.xx (BPM) for further guidance on the treatment and recording of concessional loans.

- 4.162 Transactions by general government bodies and private non-profit entities not engaged in purely commercial undertakings are often subject to non-commercial considerations. However, transfers involving provision of goods and services may also be provided or received by other sectors of the economy.

Valuation of assets and liabilities

- 4.163 As a general principle, stocks of assets and liabilities should be valued as if they were being acquired on the date to which the balance sheet relates. This implies that when they are exchanged on a market, assets and liabilities are to be valued using a set of prices that are current on the date to which the balance sheet relates and that refer to specific assets.
- 4.164 It is important though to make a clear distinction between the initial recognition of assets, and the subsequent valuation of assets. Regarding the initial recognition, i.e., the time at which the asset (or liability) enters the balance sheet, the valuation principles for valuing transactions are relevant. When it comes to the subsequent valuation, it is often not possible to use a set of prices that are current on the date to which the balance sheet relates, because there are no active markets in which the relevant assets are traded. This is not only true for most non-financial assets, certainly when taking into account the second-hand nature and the partial depreciation of these assets, but also for various financial instruments. As a consequence of the unavailability of observable market or near-market prices, alternative valuation methods need to be applied to arrive at an appropriate valuation.
- 4.165 For valuing non-financial assets, two basic approaches can be distinguished, the first one based on the market prices for similar (second-hand) assets, and the second one based on the contribution of capital services, including depreciation, to the production process in the remaining service life of the asset. The latter approach is usually approximated by estimating the written-down replacement cost, adequately adjusted for changes in prices. To compile these estimates, the perpetual inventory method is applied, which – if applied properly – replicates the net present value of future capital services derived from the asset in question. This method is described further in chapter 17).
- 4.166 In the case of non-financial assets for which active second-hand markets exist, such as for generic transport equipment and dwellings, it can be assumed that the value derived from the capital services approach will closely follow the observable market prices of the relevant second-hand assets, as the economic agents can make an explicit choice between investing in new assets, or purchasing second-hand assets. However, most non-financial assets used in production are not generic, but specifically designed and constructed for a certain production activity. Moreover, the markets for these second-hand assets may be extremely thin. As a consequence, the observable market prices for these second-hand assets may be close to their scrap value, thus not providing a good representation of the capital services that can be derived from them in the remainder of the service life, the latter representing the value of the asset in an enterprise as a going concern. One could also argue that the second-hand assets in these types of markets are not the same as the assets used in production, thus not being a good representation of the assets being valued.
- 4.167 Similar valuation issues may exist in the case of, for example, natural resources, the stocks of which are generally not traded in the market, so any values derived from occasionally traded stocks cannot be used for the valuation of similar assets because of the heterogeneity of the resources in question. In these cases, the value on the balance sheet can be approximated by the net present value of future benefits derived from these resources, using the residual value method, i.e., the output generated with the exploitation of the resources minus all costs associated with the exploitation. Exploitation rights are often provided by government for a series of rent payments. The (present value of) actual rent payments may not account for the full value of resource rents that can be derived from these assets, and the asset in question may clearly generate a future stream of resource rents, going well beyond the payments of rent to the (legal) owner. The unit having the rights to exploit the resources thus appropriates part of the resource

rents, reflecting the future capital services derived from these assets by the unit having the exploitation rights. In these cases, the value of the resources in question is split between the legal owner and the unit exploiting the resources. (See also paragraphs 14.xxx (SNA).)

- 4.168 Finally, when it comes to applying the method of the net present value of future benefits, it is important to acknowledge that it may be difficult to determine the future earnings with the appropriate degree of certainty. Assumptions also need to be made about the asset's life length and the discount factor to be applied. Therefore, the other possible sources of valuation described in the preceding paragraphs should be exhausted before resorting to this method. It should be noted, however, that the method as such is theoretically sound as can often be verified for a number of financial assets. Further, if this method is used, some sensitivity testing of the assumptions made may be appropriate. In fact, the method most commonly used to derive estimates of depreciation and the capital stock of fixed assets associates a stream of future earnings with the decline in value of a fixed asset in use in production.
- 4.169 Many financial assets are traded in markets on a regular basis and therefore can be valued by directly using the price quotations from these markets. If the financial markets are closed on the balance sheet date, the market prices that should be used in the valuation are those that prevailed on the closest preceding date when the markets were open. Debt securities have a current market value as well as a nominal value, and it is recommended to compile supplementary data on the nominal values of positions of debt securities as well. (See paragraph 4.xxx for the definition of nominal value.)
- 4.170 Valuation according to market-value equivalent is needed for valuing financial assets and liabilities that are not traded in financial markets or are traded only infrequently. For these assets and liabilities, it will be necessary to estimate fair values that, in effect, approximate market prices. The present value of future cash flows can also be used as an approximation to market prices, provided an appropriate discount rate can be used.
- 4.171 For most non-negotiable financial assets, particularly those with a face value applicable at some point in the future (e.g., loans, deposits, and other accounts receivable and payable), the present market value can be established as the face value discounted to the present by the market interest rate. In principle, therefore, if a reasonably robust estimate of the stream of future earnings to come from an asset can be made, along with a suitable discount rate, this allows an estimate of the net present value to be established. However, another principle for valuing stocks is the need for consistency in the valuation of debtor and creditor positions for financial instruments. This is one of the pragmatic reasons to apply nominal values for financial instruments, such as deposits and loans, which are not (actively) traded on the market. Moreover, conceptually, the nominal value of a debt instrument can also be calculated by discounting future interest and principal payments at the existing contractual interest rate(s) on the instrument; these interest rates may be fixed rate or variable rate. However, some would argue that such a valuation is somewhat inconsistent with a valuation at fair value of the relevant asset positions, while others would argue that nominal values, reflecting the actual payments of principal to be made in the future, including interest accrued to date, can be considered as a good approximation of the fair value. Nominal value is also considered useful because it shows actual legal liability and the starting point of creditor recovery behaviour. It is recognized, however, that nominal value provides an incomplete view of the financial position, particularly when the loans are non-performing. Therefore, information on the nominal value of non-performing loans should be included as a memorandum or supplementary item. (See paragraph 14.xx to 14.xx (SNA) / paragraph 7.xx (BPM)). Loans that have become negotiable de facto should be reclassified under debt securities. (See paragraph 12.xx (SNA) / paragraph 5.xx (BPM).)
- 4.172 Positions on deposits and other accounts receivable/payable are also recorded at nominal value. They give rise to the same issues of nominal and fair values as loans. Deposits at banks and other deposit-taking corporations in liquidation should also be recorded at their nominal value until they are written off. If significant, however, such deposits should be shown separately as a supplementary item. The same treatment is applicable for any other cases of impaired deposits (i.e., where the deposit-taking corporation is not in liquidation but faces liquidity issues).
- 4.173 When securities are quoted on markets with a buy-sell spread, the midpoint should be used to value the instrument. The spread is an implicit service of the dealer, paid by buyers and sellers (see paragraphs 11.xx–11.xx, (BPM) / paragraphs xx.xx (SNA)). Similarly, positions in financial assets and liabilities denominated in foreign currency should be valued using the midpoint at close of business between the buying and selling rates on the reference date.
- 4.174 For a restricted group of financial instruments, the above valuation methods cannot be applied. Examples relate to unlisted equity and defined benefit pension entitlements, While for the latter the present value of future pension

benefits is the generally accepted method for valuation, various approaches can be considered in the case of unlisted equity.

- 4.175 More details on the methods for valuing assets are provided in the annex to this chapter, while the valuation of specific types of assets is discussed in further detail in relevant chapters.
- 4.176 In conformity with the general rule, provision of assets, services, labour or capital in exchange for foreign cash is recorded at the actual exchange value agreed upon by the two parties to the transaction. Flows and stocks concerning foreign currency are converted to their value in national currency at the rate prevailing at the moment they are entered in the accounts, that is, the moment the transaction or other flow takes place or the moment to which the balance sheet applies. The midpoint between the buying and selling rate should be used so that any service charge is excluded.



Business accounting valuation

- 4.177 Business accounts, tax returns, supervisory data, and other administrative records are main sources of data for drawing up macroeconomic statistics. One should be aware, however, that none of these necessarily satisfies the valuation requirements of macroeconomic statistics and that accordingly adjustments may have to be made. In particular, in the interest of prudence, business accounting often adopts valuations that are not appropriate for the macroeconomic statistics. Similarly, valuations for tax purposes often serve objectives that differ from those of macroeconomic analysis. For example, the depreciation methods favoured in business accounting and those prescribed by tax authorities almost invariably deviate from the concept of depreciation employed in the SNA, particularly with their use of historical cost. (Further details on the commonalities and differences between the recording in macroeconomic statistics, particularly focusing on national accounts, and the recording in business accounting and public sector accounting are provided in chapters 28 and 30, 2025 SNA)
- 4.178 The valuation of financial assets and liabilities in data reported by enterprises or other respondents may be based on commercial, supervisory, tax, or other accounting standards that do not fully reflect the market prices of the assets and liabilities. In such cases, the data should be adjusted to reflect, as closely as possible, the market value of the financial assets and liabilities except when they are to be recorded at nominal values.

Valuation of partitioned flows

- 4.179 Where a single payment refers to more than one transaction category (as they are defined in the macroeconomic statistics), the individual flows need to be recorded separately. In such a case, the total value of the individual transactions after partitioning must equal the observed exchange value that actually occurred. For example, actual exchange values involving foreign currency include commission for currency conversion. The portion related to currency conversion should be recorded separately as transactions in services. As another example, the SNA/BPM recommends dividing interest transactions with financial corporations between two transaction categories, one showing interest as understood in the SNA/BPM and the other representing the implicit payment for financial intermediation services.
- 4.180 Partitioning is not limited to transactions; an example is real holding gains, which are separated for analytical reasons from neutral holding gains that are simply proportionate to changes in the general price level; see [redacted].
- 4.181 A less obvious mingling of transactions occurs when the provision of an asset and the related money payment or payments do not take place simultaneously. When the time gap becomes unusually long and the amount of trade credit extended is very large, the conclusion may be that implicitly an interest fee has been charged. This recording of interest becomes even more relevant in periods of high inflation and interest. In all these cases, the actual payment or payments should be adjusted for accrued interest in order to arrive at the correct value of the asset transferred. Such adjustments are generally not recommended for normal trade credit.

Valuation of rerouted transactions

- 4.182 Values of rerouted transactions will have to be derived from values of other observed transactions to which they are related. For example, values of transactions in reinvested earnings are derived from the direct investors' shares in

the net saving of the (foreign) direct investment enterprise before reinvested earnings are distributed. (See paragraphs 8.xxx and 12.xxx (SNA) / paragraphs 8.15–8.16 and 11.33–11.47 (BPM).)

Special valuations concerning products

- 4.183 Usually, the producer and the user of a given product perceive its value differently owing to the existence of taxes and subsidies on products, transport costs to be paid and the occurrence of distribution margins. In order to keep as close as possible to the views of the economic transactors themselves, the SNA records all uses at purchasers' prices including these elements, but excludes them from the value of output of the product.
- 4.184 Output of products is recorded at basic prices. *The basic price is defined as the amount receivable by the producer from the purchaser for a unit of good or service produced as output minus any tax payable and plus any subsidy receivable on the product as a consequence of its production or sale. It excludes any transport charges invoiced separately by the producer.* If it proves impossible to obtain the required information at basic prices, output may be valued at producers' prices. The producer's price is defined as the amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any value added tax (VAT), or similar deductible tax, invoiced to the purchaser. It also excludes any transport charges invoiced separately by the producer.
- 4.185 Use of products is recorded at purchasers' prices. *The purchaser's price is defined as the amount payable by the purchaser, excluding any deductible VAT or similar deductible tax, in order to take delivery of a unit of a good or service at the time and place required by the purchaser. The purchaser's price of a good includes any transport charges paid separately by the purchaser to take delivery at the required time and place.*
- 4.186 The difference in value recorded for a product between when it is produced and the moment it is used for, say, final consumption expenditure can be considerable. Components of this difference may be:
- a. Taxes less subsidies on products payable by the producer;
 - b. Trade and transport margins, including taxes less subsidies on products payable by wholesale and retail traders;
 - c. Transport, including taxes less subsidies on products, paid separately by the consumer;
 - d. Predictable quality increases producing additional output volume less current losses during storage;
 - e. Holding gains while the product is with the producer and with wholesale and retail traders.

As one can see from the above, the difference between the original basic price and ultimate purchasers' price of a particular good encompasses both pure price and pure volume elements. In practice, of course, the estimates do not keep track of individual products but are made at a more global level for groups of products.

- 4.187 Imports and exports of goods are recorded in the SNA/BPM at border values. Total imports and exports of goods are valued free-on-board (FOB, that is, at the exporter's customs frontier). As it may not be possible to obtain FOB values for detailed product breakdowns, the tables containing details on foreign trade show imports of goods valued at the importer's customs frontier (CIF, that is, cost, insurance and freight), supplemented with global adjustments to FOB values. CIF values include the insurance and freight charges incurred between the exporter's frontier and that of the importer. The value on the commercial invoice may of course differ from both of these.
- 4.188 As the overall balance of imports and exports must conform to actual circumstances, border valuation of goods has consequences for the recording of freight and insurance in the SNA/BPM. Usually, the values of both imports and exports for these service items have to be adapted to compensate for the special conventions on goods traded with the rest of the world. Further details on this treatment are in chapters 15 and 33 (SNA) / chapters 10 and 11 (BPM).

- 4.189 In relation to the valuation of exports and imports, it is generally acknowledged that a valuation at the observed exchange values, which is closely aligned to the invoice values, is the conceptually preferred method. Subject to further testing of the implementation in practice, it is intended to be introduced as the basic principle for valuing imports and exports in the next versions of SNA/BPM.

Valuation of other flows

Other changes in the volumes of assets and liabilities

- 4.190 In order to determine the valuation of the other changes in the volume of assets and liabilities, it is usually necessary to value the asset before and after the change in volume and take the difference that is not explained by any transaction and holding gains and losses as the value of the other change in volume.

- 4.191 Other changes in the volume of financial assets and liabilities are recorded at the observable market prices of similar instruments. For writing-off of financial instruments that are valued at nominal values, the value recorded in the other changes in the volume of assets and liabilities account should correspond to their nominal value prior to being written off. For all reclassifications of assets and liabilities, values of both the new and old instruments should be the same.

Holding gains and losses

- 4.192 Holding gains and losses accrue continuously and apply to both non-financial and financial assets and liabilities. In general, they are estimated by deducting from the total change in the value of assets those that can be attributed to transactions and to other changes in volumes.

- 4.193 Since most financial assets are matched by liabilities, either within the domestic economy or with the rest of the world, it is important that holding gains in one are matched by holding losses in the other and vice versa. A holding gain occurs when an asset increases in value or a liability decreases in value; a holding loss occurs when an asset decreases in value or a liability increases in value. The value of holding gains and losses during an accounting period shows the net changes of holding gains and holding losses for an asset and a liability separately. In practice, the value of holding gains and losses is calculated for each asset and liability between two points in time: the beginning of the period or when the asset or liability is acquired or incurred and the end of the period or when the asset or liability is sold or extinguished.

- 4.194 For loans, deposits, and other accounts receivable and payable sold at a discount, the transaction values recorded in the financial account may differ from the nominal values recorded in the balance sheets, or in the case of external accounts, in the IIP. Such differences are recorded as holding gains and losses in the other changes in financial assets and liabilities account. (See also paragraph 13.xx (SNA) / paragraph 9.33 (BPM7).)

3. Time of recording

Choice of time of recording

- 4.195 When discussing timing in the SNA/BPM, an essential distinction should be made between stock data as recorded in balance sheets, on the one hand, and flow data as recorded in the other accounts, on the other. Balance sheets, by definition, refer to specific points in time. In contrast, flows are aggregations, over some chosen accounting period, of individual transactions or other flows, which are themselves scattered over the accounting period.

- 4.196 Thus, the SNA/BPM does not show individual transactions or other flows, but there are four reasons why precise rules on their individual timing must be given. In the first place, rules have to be formulated to say in which accounting period the discrete flows are to be recorded. Secondly, an exact timing of individual flows within the accounting period is crucial to distinguish between changes in net worth/IIP due to transactions and those due to other changes (e.g., other changes in volume and holding gains or losses). This distinction is particularly important in situations of high inflation. Thirdly, the integrated nature of the system means that the stocks recorded on the balance sheet are influenced by the timing of flows. Finally, the quadruple accounting system requires that entries for a transaction are made by the counterparties at the same time. This ensures the consistency of accounts for each party.

- 4.197 One of the problems in pinning down the timing of transactions is that activities of institutional units often extend over periods in which several important moments can be distinguished. For instance, many commercial sales (in external accounts relating to exports and imports of goods) commence with the signing of a contract between a seller and a buyer, encompass a date of delivery (dates of crossing border in the case of exports/imports) and a date or dates on which payments become due and are only completed as of the date the last payment is received by the seller. Each of these distinct moments in time is to some extent economically relevant and may result in multiple transactions in national accounts/external accounts.
- 4.198 Similarly, in analysing government expenditure one can distinguish the day that a budget is voted upon by the legislature, the day on which the ministry of finance authorizes a department to pay out specified funds, the day a particular commitment is entered into by the departments, the day deliveries take place and finally the day payment orders are issued and cheques are paid. With regard to taxes, for example, important moments are the day or the period in which the liability arises, the moment the tax liability is definitively assessed, the day that it becomes due for payment without penalty and the day the tax is actually paid or refunds are made.
- 4.199 Clearly, making entries for all successive stages discernible within the activities of institutional units, although theoretically possible, would severely overburden the SNA/BPM. A choice has to be made, recognizing (a) the needs of macroeconomic analysis, (b) micro-economic views, and (c) commonly available sources. Often, in this respect, a distinction is drawn between recording flows on a cash basis, due-for-payment basis, the commitment basis and accrual basis. There may be other timing bases, such as physical movement or administrative process, used in some data sources. As explained in the following paragraphs, the SNA/BPM and other macroeconomic statistics recommend recording each transaction on an accrual basis.

Choice for recording on an accrual basis

- 4.200 Cash accounting records only cash payments and records them at the times these payments occur. This method is widely used for certain business purposes. A practical advantage is the avoidance of problems connected with valuing non-monetary flows. Yet, cash accounting cannot be used generally for economic and national and external accounting as the times at which payments take place may diverge significantly from the economic activities and transactions to which they relate and it is these underlying activities and transactions that the SNA/BPM seeks to portray. Moreover, cash recording cannot be applied to the many non-monetary flows included in the SNA/BPM.
- 4.201 Due-for-payment recording shows flows that give rise to cash payments at the latest times they can be paid without incurring additional charges or penalties and, in addition to these, actual cash payments at the moments they occur. The period of time (if any) between the moment a payment becomes due and the moment it is actually made is bridged by recording a receivable or a payable in the financial accounts. Due-for-payment recording furnishes a more comprehensive description of monetary flows than does cash accounting. A disadvantage is, of course, that the recording is still limited to monetary flows.
- 4.202 Accrual accounting records flows at the time economic value is created, transformed, exchanged, transferred or extinguished. This means that flows that imply a change of ownership are entered when the change occurs, services are recorded when provided, output at the time products are created and intermediate consumption when materials and supplies are being used. In other words, the effects of economic events are recorded in the period in which they occur, irrespective of whether cash was received or paid or was due to be received or paid. When an economic event is accompanied by a settlement at a later date, such as a purchase of goods financed by a trade credit, the time lag is bridged by recording each event separately, with the corresponding entry at the time of the change in ownership being trade credit payable. The SNA/BPM favours accrual accounting because:
- a. The timing of accrual accounting is in full agreement with the way transactions, other flows, and main economic aggregates (value added, external balance on goods and services, saving and net lending/net borrowing) are defined in the SNA/BPM. This agreement allows the profitability of productive activities to be evaluated correctly (that is, without the disturbing influence of leads and lags in cash flows) and a sector's net worth, or a country's IIP, to be calculated correctly at any point in time;
 - b. Accrual accounting provides the most comprehensive information because all flows can be recorded consistently, including non-monetary transactions, imputed transactions, and other flows.

- 4.203 The change of economic ownership is central in determining the time of recording on an accrual basis for transactions in goods, non-financial assets, and financial assets. A change in ownership from an economic point of view means that all risks, rewards, and rights and responsibilities of ownership in practice are transferred. In general, a change in legal ownership also involves a change in economic ownership. In some cases, a change of economic ownership takes place even though the legal ownership remains unchanged (e.g., financial leases and transactions between an enterprise and its foreign branches). In other cases, there is no change in economic ownership, even though there is a change in legal ownership. For example, for repurchase agreements involving the provision of securities for cash, the risks and rewards attached to the securities remain with the original holder (as discussed in paragraph 12.xx (SNA) / paragraphs 5.xx–5.xx (BPM)) and the only transaction is a loan. Similarly, in the case of securities lending without cash collateral, there is no change in ownership of the securities, although securities lending fees may arise (see paragraph xx.xx (SNA) / paragraphs 12.xx–12.xx (BPM)).
- 4.204 Many transactions, such as everyday purchases of households in shops, are monetary transactions in which a product is delivered against immediate, or nearly immediate, payment in cash. In those instances there are no differences between the three methods discussed in the above. Accrual accounting is particularly relevant to the timing of various internal transactions (such as output that is added to the inventories of the producer), exchanges in which the parties deliver at differing times (such as sales with deferred payments) and obligatory transfers (taxes and flows connected with social security).
- 4.205 Usually, accrual accounting is the norm for the institutional units involved. Numerous transactions consist of an exchange between two enterprises of, say, goods for financial assets. In such an exchange, accounting entries will be made in the books of each enterprise, showing the same dates for the acquisition of the goods and the surrender of the financial assets, on the one hand, and for the acquisition of the financial assets and the surrender of the goods, on the other. Sometimes, however, the two parties involved in a transaction will not perceive it as occurring at the same moment. Furthermore, some transactors, in particular government units, do not keep records of purchases on an accrual basis. In these cases, the rules of consistency in the SNA/BPM require that efforts should be undertaken to correct basic statistics for major deviations and flaws. The application of the general rule of recording on an accrual basis to the most common circumstances is discussed below.

Time of recording of transactions in goods and services

- 4.206 The time of recording of the acquisition of goods is the moment when the economic ownership of those goods changes hands. When change of ownership is not obvious, the moment of entering in the books of the transaction partners may be a good indication and, failing that, the moment when physical possession and control is acquired. These subsidiary rules apply in particular to internal transactions or when a change of ownership is taken to occur under a financial lease or hire-purchase arrangement. Imports and exports of goods are recorded when change of ownership occurs. In the absence of sources specifying the date on which ownership changes, there is a strong presumption that the goods will cross the frontiers of the countries concerned either shortly before or soon after the change of ownership takes place. Trade statistics based on customs documents reflecting the physical movement of goods across the national or customs frontier may therefore often be used as an approximation. Similar rules of change in economic ownership apply to transactions in non-produced non-financial assets.
- 4.207 Services are recorded in the SNA when they are provided. Some services are special in the sense that they are characteristically supplied on a continuous basis. Examples are operating leasing, insurance and housing services (including those of owner-occupied dwellings). These services are recorded as provided continuously over the whole period the contract lasts or the dwelling is available.
- 4.208 Transactions in goods should be recorded as of the time that the change of economic ownership takes place. Goods are considered to change economic ownership when the parties enter the goods in their books and make a corresponding change to their financial assets and liabilities. For high-value capital goods such as ships, heavy machinery, and other equipment, ownership changes are recorded at the time agreed between the parties as to when ownership changes (see paragraph 10.xx, BPM7). When a contract for building and other construction is agreed in advance, progressive change of ownership occurs for the work-in-progress, which may take several months or years to complete. When the contract calls for stage payments (progress payments), the transaction values may often be approximated by the value of stage payments made each period (see paragraphs 5.xx and 10.xx, BPM7). A difference in timing between the change of ownership and payments may give rise to trade credit and advances.

- 4.209 The timing used in international merchandise trade statistics generally follows customs procedures, which are set up to record the movement of goods across borders. The time at which goods cross the border can be taken only as an approximation to the time when the change of economic ownership occurs. A customs-based collection system usually provides a choice of dates at which transactions may be recorded (e.g., lodgement of customs declaration, customs clearance of goods). The time of recording in the international guidelines for merchandise trade statistics is when the customs declaration is lodged. Ideally, for external accounts purposes, customs data should be adjusted (see paragraphs 3.xx–3.xx, BPM7). Likewise, an exchange record system that reflects payments may not coincide in timing with the change in economic ownership of the goods.
- 4.210 Goods on consignment (i.e., goods intended for sale but not actually sold when the goods cross the frontier) should be recorded only at the time economic ownership changes. Goods under financial lease arrangements are considered to change economic ownership at the inception of the lease (see paragraph 5.xx on the definition of a financial lease and paragraphs 7.xx and 10.xx for positions and transactions arising from financial leases). Goods sent abroad for processing under the ownership of the same party are not treated as if they change economic ownership. Goods may move between a parent and its branch abroad. In that case, possibilities exist that either the goods have changed economic ownership or they may have been sent for processing. The correct statistical treatment is to identify which location assumes the risks and rewards of ownership most strongly (e.g., from factors such as whether the goods are included in the accounts, and which location is responsible for subsequent sale of the goods). For goods under merchanting, purchases and resales are recorded at the time the change in economic ownership of goods occurs.

Time of recording of transactions in services

- 4.211 Transactions in services are recorded when the services are provided. Some services, such as some transport or hotel services, are provided within a discrete period, in which cases, there is no problem in determining the time of recording. Other services are supplied or take place on a continuous basis. For example, construction services, operating leasing, and insurance services are recorded continuously as long as they are being provided. When construction takes place with a prior contract, the ownership of the structure is effectively transferred progressively as the work proceeds. When services are provided over a period of time, there may be advance payments or settlements at later dates for such services (e.g., freight, insurance, port services). The provision of services should be recorded on an accrual basis in each accounting period (i.e., they should be recorded as they are rendered, not when payments are made). Entries for advance payments or settlements at later dates should be made in the appropriate accounts when they occur (as explained in paragraph 3.xx in the case of import of goods).

Time of recording of distributive transactions

- 4.212 Distributive transactions are recorded at the moment the related claims arise. As a result, for example, remuneration of employees, interest, social contributions and benefits are all recorded in the period during which the amounts payable accrue. (See paragraphs 12.xx–12.xx for the recording of remuneration of employees associated with employee stock options.) With respect to some distributive transactions, the time of accrual depends on the unit's decision as to when to distribute earned income or make a transfer.
- 4.213 Interest is recorded as accruing on a continuous basis because the financial resources are provided for use on a continuous basis. For some financial instruments, the debtor does not make any payments to the creditor until the financial instrument matures, at which time a single payment discharges the debtor's liability; the payment covers the amount of funds originally provided by the creditor and the interest accumulated over the entire life of the financial instrument. Corresponding entries to the interest accruing in each period before maturity should be recorded as financial transactions that represent an additional acquisition of the financial asset by the creditor and an equal incurrence of a liability by the debtor.
- 4.214 Dividends are recorded at the moment the shares go ex-dividend. Three dates are associated with dividends:
- a. the date they are declared;
 - b. the date they are excluded from the market price of shares, known as the ex-dividend date. The recipients of the dividends are determined from the register of shareholders at this time and subsequent shareholders do not have a right to the dividends; and
 - c. the date they are settled.

- 4.215 Although dividends sometimes may be related to the enterprise's profits in the previous period, in other cases, they are only loosely related or not at all. The price of shares includes declared dividends up to the ex-dividend date, thus the holder of the shares before the ex-dividend date owns the share and does not hold a separate debt instrument reflecting declared and unpaid dividends. Between the ex-dividend date and actual settlement, the amount payable is recorded as other accounts receivable/payable. Withdrawals from income of quasi-corporations, such as distributed branch profits, are recorded when they actually take place. Reinvested earnings are derived from retained earnings, and therefore they are recorded in the period in which retained earnings accrue. (See paragraphs 12.xx–12.xx (*BPM*) for issues in the calculation of reinvested earnings.)
- 4.216 Taxes and other compulsory transfers should be recorded when the activities, transactions, or other events occur that create the government's claim to the taxes or other payments. In principle, income taxes and social contributions based on income should be attributed to the period in which the income is earned. In practice, however, some flexibility may be needed so that income taxes deducted at the source and regular prepayments of income taxes may be recorded in the periods in which they are paid, and any final tax liability on income may be recorded in the period in which it is determined.
- 4.217 Some compulsory transfers, such as fines, penalties, and property forfeitures, are determined at a specific time. These transfers are recorded at the time the issuing unit has an unconditional claim on the funds; if a fine or penalty is subject to further appeal, an unconditional claim only exists once the appeal has been resolved.
- 4.218 Determining the time of recording for grants and other voluntary transfers can be complex because there is a wide variety of eligibility conditions that have varying legal powers. In some cases, a potential grant recipient has a legal claim when it has satisfied certain conditions, such as the prior incurrence of expenses for a specific purpose or the passage of legislation. These transfers are recorded when all requirements and conditions are satisfied. In other cases, the grant recipient never has a legal claim on the donor, and the transfer should be attributed to the time at which the settlement is made (e.g., cash payment). In general, the time of recording of voluntary transfers is determined by the time at which there is a change in the economic ownership of the resources (such as goods, services, or financial assets) that are corresponding entries to transfers.

Time of recording of transactions in non-produced non-financial assets

- 4.219 Transactions in non-produced nonfinancial assets are recorded at the time economic ownership of these assets changes. The treatment is similar to those for goods and financial assets, as discussed in paragraphs 4.xx and 4.xx–4.xx (*BPM*), respectively.

Time of recording of transactions in financial assets and liabilities

- 4.220 Transactions in financial assets (including payments of cash) are recorded in the SNA/*BPM* when economic ownership changes. Some financial claims or liabilities defined in the SNA/*BPM*, in particular trade credits and advances, are the implicit result of a non-financial transaction and are not otherwise evidenced. In these cases, the financial claim is deemed to arise when its non-financial counterpart occurs. The same holds for financial transactions that the SNA/*BPM* records between a quasi-corporation and its owner/branch and its parent.
- 4.221 In some cases, both parties involved in a financial transaction may record it at varying dates in their own books because they acquire the documents evidencing the transaction at different times. This variation usually is caused by the process of clearing, the time cheques are in the mail, etc. The amounts involved in such "floats" are generally substantial in the case of transferable deposits and other accounts receivable and payable. Again, reasons of consistency require that the transactions are entered on the same date for both parties. If no precise date can be fixed, the timing of the change of economic ownership is determined according to the date on which the creditor receives his payment.
- 4.222 For securities, the transaction date (that is, the time of the change in ownership of the securities) may precede the settlement date (that is, the time of the delivery of the securities). Both parties should record the transactions at the time ownership changes, not when the underlying financial asset is delivered. Any significant difference between transaction and settlement dates gives rise to accounts payable or receivable. In practice, when the delay between the transaction and settlement is short, the time of settlement may be considered as an acceptable proxy, so that

accounts receivable/payable would not arise. In cases of longer delays, however, accounts receivable/payable should be identified.

- 4.223 According to the accrual basis, repayments of debts are recorded when they are extinguished (such as when they are paid, or rescheduled, or forgiven by the creditor). When arrears occur, no transactions should be imputed, but the arrears should continue to be shown in the same instrument until the liability is extinguished. If the contract provided for a change in the characteristics of a financial instrument when it goes into arrears, this change should be recorded as a reclassification in the other changes in the financial assets and liabilities account. The reclassification applies to situations where the original contract remains, but the terms within it changes (for example, interest rates or repayment periods). If the contract is renegotiated or the nature of the instrument changes from one instrument category to another (for example, from bonds to equity), the consequences are to be recorded as new transactions. Consistent with the accrual principle, an overdue obligation to settle a financial derivative contract is not recorded as a transaction; however, the obligation is reclassified to a debt liability because of the change in the nature of the claim (see [paragraph xx.xx \(SNA\)](#) / [paragraph 5.xx \(BPM\)](#)).
- 4.224 Data on arrears are important in their own right, and thus should be presented as supplementary items, where significant (or memorandum items in the case of Exceptional Financing, see Appendix 1). Although it is useful to identify some commonly important arrears (such as arrears on public and publicly guaranteed debt), flexibility is needed in determining which items of arrears are important to disseminate, depending on each economy's circumstances. Arrears are described further in [paragraphs 5.xx–5.xx \(BPM\)](#)
- 4.225 Activation of one-off (non-standardized) guarantees gives rise to financial transactions because this involves a creation of a new liability. The time of recording of flows arising from activation of one-off guarantees (including capital transfers and other changes in the volume of assets and liabilities, if applicable) is determined by the occurrence of the events activating the guarantee. The treatment of flows arising from the activation of one-off guarantees is described in more detail in [paragraphs 25.xx to 25.xx \(SNA\)](#) / [paragraphs 8.42 to 8.45 \(BPM\)](#).
- 4.226 Employee stock options (ESOs) are recognized at grant date. Remuneration of employees associated with employee stock options should be recorded as accruing over the period to which the option relates, which generally is the period between the granting and vesting dates. Sometimes, the options may cover the period before the granting date, which should also be taken into account when allocating the remuneration of employees. Recording of flows associated with ESOs are discussed [in paragraphs 25.xx to 25.xx \(SNA\)](#) / [paragraphs 8.xx, 9.xx and 11.xx \(BPM\)](#).

Time of recording of output and intermediate consumption

- 4.227 The principle of recording on an accrual basis implies that output is recorded over the period in which the process of production takes place. Thus, additions to work-in-progress are recorded continuously as work proceeds. When the production process is terminated, the whole of the work-in-progress accumulated up to that point is effectively transformed into a stock of finished product ready for delivery or sale.
- 4.228 Similarly, the intermediate consumption of a good or service is recorded at the time when the good or service enters the process of production, as distinct from the time it was acquired by the producer.

Time of recording of changes in inventories, depreciation and depletion

- 4.229 Inventories may be materials and supplies held as inputs by producers, output as yet unsold, or products held by wholesale and retail traders. In all cases, additions to inventories are recorded when products are purchased, produced or otherwise acquired. Deductions from inventories are recorded when products are sold, used up as intermediate consumption or otherwise relinquished.
- 4.230 The timing of depreciation and depletion is inextricably linked with the question of its valuation. Depreciation and depletion are cost categories that accrue over the whole period the fixed asset or the natural resource in question is used for productive purposes. The exact proportioning to accounting periods depends on the rate of depreciation or depletion.

Time of recording of composite transactions and balancing items

- 4.231 Transactions that are measured as the balance of two or more other transactions follow the timing of the constituent basic flows. For example, implicit financial services on loans and deposits are recorded as interest on loans and deposits accrues.
- 4.232 The same rule for time of recording applies to balancing items. However, due to the variety of transactions and other flows covered, each with its own characteristics, some thought is needed in interpreting balancing items. For instance, in analysing the balancing item “saving” of non-financial corporations, one should be aware that the time when the operating surplus arises does not necessarily tally with the timing of the other factors, such as when dividends are payable.

Time of recording of other flows

- 4.233 Other changes in the volume of assets and liabilities are usually discrete events that accrue at precise moments or within fairly short periods of time, and should be recorded when the events occur.
- 4.234 Revaluations can occur continuously as prices and exchange rates change. Changes in prices and exchange rates often have a more continuous character, particularly in respect of assets with international character and assets for which active markets exist. In practice, nominal holding gains or losses will be computed between two points in time:
- a. The moment at which:
 - The accounting period begins; or
 - Ownership is acquired from other units (through purchase or a transaction in kind); or
 - An asset is produced; and
 - b. The moment at which:
 - The accounting period ends; or
 - The ownership of an asset is relinquished (through sale or a transaction in kind); or
 - An asset is consumed in the production process.
- 4.235 One may wonder why nominal holding gains and losses are not calculated over a period beginning at the moment on which two units agree to a mutual exchange of assets instead of the period that starts with the moment on which the assets are acquired. After all, does not the signing of the contract fix prices, implying that the risk for any later price/exchange rate changes is being transferred? The SNA/BPM, however, regards commitments resulting from a contract as contingent until one of the parties has performed its obligation (by passing the ownership of some asset to the other party, providing a service or providing labour or capital). Also, a unit can incur holding gains and losses only on the assets or liabilities over which it has economic ownership. The combination of these two rules implies that during the period between the signing of the contract and the date on which the first party delivers, the second party cannot incur any price/exchange rate risks on this contract: the second party neither owns the assets to be delivered nor owns a claim on the first party to be recorded in the financial accounts.
- 4.236 Changes in structure and classification should be entered at the moment when, according to the rules adopted in the SNA/BPM, a unit or an asset is moved to a different category than that to which it was classified previously. Integrated stock-flow systems like the SNA or the integrated IIP require that all reclassifications are recorded and all entries for the reclassification are recorded at the same time.

- 4.237 In order to obtain statistical series that are more comparable over time, one might be tempted to stockpile major reclassifications for a number of years and enter them as one block at the end of this period. However understandable this procedure might be, it does not conform to the recommendations of the SNA/BPM, which aim at correct estimates on levels. Keeping records of reclassifications makes it possible in principle to reconstruct time series based on the situation in any accounting period.

Timing adjustments for external transactions

- 4.238 Differences in the time of recording by partner economies may occur due to various factors. One of the intrinsic problems with recording external transactions is the difference in time zones. Differences in time of recording may also arise from delays in mail deliveries or settlement clearing processes. In most cases, data at some aggregate level rather than individual records are used in the compilation of external accounts. Several data sources may often only approximate the required basis. It is important to make timing adjustments where there are major divergences from the required basis.
- 4.239 In choosing among available statistical sources, compilers may wish to consider the advantage of using data for which the correct timing is already recorded. For example, records of actual drawings on loans are preferred to sources that quote authorization dates or program dates that may not be realized in fact. Some sources chosen by compilers as generally the most suitable may not have been specifically designed to yield information for the purpose of compiling external accounts.
- 4.240 Timing adjustments to international merchandise trade statistics may be necessary because these statistics may not reflect changes in economic ownership. Moreover, they may not always reflect physical movements correctly. Timing adjustments should be made when practices in customs statistics lead to distortions. For example, in the case of the purchase or sale of ships and aircrafts, information on the time at which the goods are entered in the books of the supplier or customer could be used. It is a good practice to identify the timing of large individual shipments or transactions (such as a ship or aircraft) to ensure that the goods flow and corresponding financing transactions are recorded in the same period.
- 4.241 A change in the economic ownership of goods can vary widely from the time at which the goods are recorded in trade statistics, if a lengthy voyage is part of the process of importing or exporting. If the unit value of trade changes substantially from the beginning to the end of the reporting period, the possible difference of one or more months between the shipment or receipt of goods and the change of ownership can be a source of error in the statement for a particular economy and a source of asymmetries between partner economies. Inquiries, perhaps on a sample basis, are required to ascertain specific practices, and timing adjustments should, in principle, be applied to correct the trade statistics for those classes of goods that are found to change ownership at times other than those at which the goods were recorded in the trade statistics.
- 4.242 Goods on consignment may often be recorded at the time the goods cross the frontier, on the assumption that a change of economic ownership has occurred or will shortly occur. If that treatment is followed and there is no change of ownership, adjustments will have to be made, preferably by revising the original entries. In practice, these adjustments may be made in the periods when the goods are returned, if goods returned involve minor cases.
- 4.243 Information based on exchange records provides data on a cash basis. For certain transactions, cash and accrual bases for recording may be the same, but for many they will differ. In particular, transactions in goods, services, and income may not coincide with the corresponding payments for settling the transactions. Alternative information should be used routinely to verify or adjust selected transaction categories. Compilers using an exchange record system should check each large settlement transaction. Information on interest from either the payments records or debt service schedule may not be appropriate for accrual accounting. Other possibilities of deriving interest accrual, such as using the data on positions and contractual interest rates, should be explored and implemented.

Balance sheet items

- 4.244 Stocks of assets and liabilities, as included in balance sheets, can be drawn up for any point in time. The SNA defines balance sheets for all sectors at the moment when one accounting period ends and a new accounting period begins. The closing balance sheet of one period is identical to the opening balance sheet of the next one, so there

remain no price changes, reclassifications or other economic flows that are not duly recognized by the SNA. The same principles hold for the net IIP, as included in the external accounts.

4. Unit of account and currency conversion

Unit of account

- 4.245 Values of non-financial and financial transactions as well as the values of stocks or positions of (financial) assets and liabilities may be expressed initially in a variety of currencies or in other standards of value, such as Special Drawing Rights (SDRs). The conversion of these values into a reference unit of account is a requisite for the construction of consistent and analytically meaningful accounts.
- 4.246 National and external accounts can be compiled in the domestic currency as well as in another currency. Data in domestic currency are needed because several other macroeconomic and micro data are compiled in domestic currency, except when a foreign currency is used as a legal tender. Economic analysis often uses data from several macroeconomic statistical systems. Conversely, data in an international unit of account (a foreign currency) may be needed for international liquidity management and to address special issues for high inflation, significant exchange rate fluctuations, and multiple exchange rates. In addition, a standard or international unit of account is necessary to allow for aggregation on a global or regional basis and to facilitate international comparisons.
- 4.247 For compiling the external accounts, a standard unit of account is required for global presentation and analysis. It is preferable that the unit of account be a stable one; that is, values of transactions expressed in that unit should not be significantly affected by changes (relative to the unit of account) in values of currencies in which those transactions occur. Transactions expressed in a unit that is stable in this sense nonetheless may reflect price changes resulting from other causes; that is, a series expressed in a so-called stable unit of account is not the equivalent of a volume measure or constant price series. The theoretical ideal of a widely recognized and perfectly stable standard unit of account simply does not exist in practice.

Domestic versus foreign currency

- 4.248 For an economy, a domestic currency is distinguished from foreign currency. Domestic currency is that which is legal tender in the economy and issued by the monetary authority for that economy; that is, either that of an individual economy or, in a currency union, that of the common currency area to which the economy belongs. All other currencies are foreign currencies.
- 4.249 Under this definition, an economy that uses as its legal tender a currency issued by a monetary authority of another economy – such as U.S. dollars – or of a common currency area to which it does not belong should classify the currency as a foreign currency, even if domestic transactions are settled in this currency. The term “currency” should be understood in the broad sense (i.e., currency includes not only banknotes and coins but all means of payments issued by financial institutions in an economic territory). Unallocated gold accounts and other unallocated accounts in precious metals giving title to claim the delivery of gold or precious metal are treated as denominated in foreign currency. The treatment of unallocated accounts in other commodities will need to be decided at the time such cases arise in the future.
- 4.250 SDRs are considered to be foreign currency in all cases, including for the economies that issue the currencies in the SDR basket. Any other currency units issued by an international organization, except in the context of a currency union (see [paragraph 5.221 \(SNA\)](#) / [paragraph 4.221 \(BPM\)](#)), are considered foreign currency.

Currency of denomination and currency of settlement

- 4.251 A distinction should be made between the currency of denomination and the currency of settlement. The currency of denomination is determined by the currency in which the value of flows and stocks is fixed as specified in the contract between the parties. Accordingly, all cash flows are determined using the currency of denomination and, if necessary, converted into the domestic currency or another unit of account for the purpose of settlement or compilation of accounts. The currency of denomination is important for distinguishing transaction values and holding gains and losses.

- 4.252 The currency of settlement may be different from the currency of denomination. Using a currency of settlement that is different from the currency of denomination simply means that a currency conversion is involved each time a settlement occurs. The currency of settlement is important for international liquidity and measurement of potential foreign exchange drains. The currency of settlement is also important for defining reserve assets (see [paragraph 6.64 \(BPM\)](#)).
- 4.253 The currency of denomination of equity and investment fund shares is generally the domestic currency of the economy in which the issuer is resident. However, when equity is issued in a currency other than the domestic currency, then that currency is the currency of denomination.
- 4.254 Debt instruments with both the amount to be paid at maturity and all periodic payments (such as coupons) indexed to a foreign currency are classified and treated as being denominated in that foreign currency.
- 4.255 Some financial assets and liabilities are denominated in more than one currency. However, if the amounts payable are linked to one specific currency, then the liability should be attributed to that currency. Otherwise, compilers are encouraged to disaggregate such multicurrency instruments by the component currencies.
- 4.256 Determining the currency of denomination is not always clear in financial derivative contracts to purchase or sell foreign currency using domestic currency. The decisive factor in determining the currency of denomination for these contracts is the exposure to currency movements. If settlement of a financial derivative contract is linked to a foreign currency, even though payment is required in domestic currency, then the financial derivative is to be classified as denominated in foreign currency.

Currency conversion principles

- 4.257 Flows denominated in a foreign currency are converted to their value in the domestic currency at the rate prevailing when the flows take place, and positions are converted at the rate prevailing on the balance sheet date. The midpoint between the buying and selling rates should be used at the time of transaction (for transactions) and at the close of business on the reference date for positions, with the difference between buying or selling prices and midpoint prices to be treated as service charges. The valuation in the domestic currency of a purchase or sale on credit denominated in a foreign currency may differ from the value in domestic currency of the subsequent cash payment because the exchange rate changed in the interim. Both transactions should be valued at their current market values as of the dates they actually occurred, and a holding gain or loss resulting from the change in the exchange rate should be recorded for the period or periods in which the gain or loss occurs.
- 4.258 In principle, the actual exchange rate applicable to each transaction should be used for currency conversion. The [use](#) of a daily average exchange rate for daily transactions usually provides a good approximation. If daily rates [cannot](#) be applied, average rates for the shortest period should be used. Some transactions occur on a continuous basis, such as the accrual of interest over a period of time. For such flows, therefore, an average exchange rate for the period in which the flows occur should be used for currency conversion.
- 4.259 Derived measures relating to a period are calculated by subtracting one type of flow from another. In principle, therefore, derived measures of flows in one currency (e.g., domestic currency) should not be directly converted into another currency (e.g., foreign currency). First, the underlying flows themselves should be converted from the domestic currency into the foreign currency. Then, the derived measures in foreign currency can be calculated from the relevant flows denominated in foreign currency. It is possible that a derived measure, such as saving and the current external account balance, denominated in one currency may be different or even with the opposite sign from that denominated in another currency. In addition to the variations in exchange rates, the variations in the timing of underlying flows cause the differences in a derived measure denominated in different currencies.
- 4.260 Under a multiple exchange rate regime, two or more exchange rates are applicable to different categories of transactions; the rates favour some categories and discourage others. Such rates incorporate elements similar to taxes or subsidies. Because the multiple rates influence the values and the undertaking of transactions expressed in domestic currency, net proceeds implicitly accruing to authorities as a result of these transactions are calculated as implicit taxes or subsidies. The amount of the implicit tax or subsidy for each transaction can be calculated as the difference between the value of the transaction in domestic currency at the actual exchange rate applicable and the

value of the transaction at a unitary rate that is calculated as a weighted average of all official rates used for external transactions. For conversion of positions of external financial assets and liabilities in a multiple rate system, the actual exchange rate applicable to specific assets or liabilities at the beginning or end of the accounting period is used.

- 4.261 Parallel (unofficial) or black market rates cannot be ignored in the context of a multiple rate regime and can be treated in different ways. For instance, if there is one official rate and a parallel market rate, the two should be handled separately. Transactions in parallel markets should be converted using the exchange rate applicable in that market. If there are multiple official rates and a parallel rate, the official rates and the parallel rate should be treated as distinct markets in any calculation of a unitary rate. Transactions effected at the parallel rate usually should be converted separately at that rate. In some instances, however, parallel markets may be considered effectively integrated with the official exchange rate regime. Such is the case when most or all transactions in the parallel market are sanctioned by the authorities or when the authorities actively intervene in the market to affect the parallel rate. In these cases, the calculation of the unitary rate should include both the official and parallel market rates. If only limited transactions in the parallel market are sanctioned by the authorities, the parallel rate should not be included in the calculation of a unitary rate.

5. Aggregation, netting, consolidation

Aggregation

- 4.262 The immense number of individual transactions, other flows, and assets and liabilities within the scope of the SNA/BPM have to be arranged in a manageable number of analytically useful groups. In the SNA/BPM, such groups are constructed by crossing two or more classifications.
- 4.263 As a minimum, in SNA, a classification of institutional sectors or industries is crossed with the classification of transactions, other accumulation entries or assets. Additionally, revenues must be distinguished from expenditures and assets from liabilities. In order to accommodate more detailed analysis, the classes thus generated may be further subdivided: examples are specifications of kind of product or asset, of function and of transaction partners.
- 4.264 The classification of transactions, other flows, and stocks, or positions, of financial assets and liabilities is aimed at developing aggregates that group similar items and separate those items that have different characteristics. Aggregates and classifications are closely linked in that classifications are designed to produce the aggregates thought to be most useful.
- 4.265 Aggregates are summations of elementary items in a class of transactions, other flows, or positions. For example, remuneration of employees is the sum of all flows that are classified as remuneration of employees. For financial assets and liabilities, the aggregation of stock or flow data is usually done across all institutional units within a subsector or sector. Aggregation is hierarchical in the sense that upper-level aggregates are derived directly by summing the lower-level aggregates.
- 4.266 Individual units may have the same kind of transaction both as a credit and a debit – for example, they may pay as well as receive interest or may acquire foreign currency as well as sell the foreign currency. Similarly, individual units may have the same kind of financial instrument both as an asset and as a liability – for example, they may have a claim in the form of debt securities as well as a liability in the form of debt securities.
- 4.267 Since the classifications in the SNA/BPM contain a number of levels made explicit in the codes for the various transactions, other flows and assets, corresponding levels of aggregation may be distinguished.
- 4.268 Although conceptually the value for each aggregate is the sum of the values for all elementary items in the relevant category, in practice other estimation methods are frequently used. In the first place, information on elementary transactions, other flows and assets may be incomplete or even non-existent. Secondly, the data obtained from different primary sources are usually not fully consistent due to variations in definitions and coverage, so adjustments at the aggregate level are necessary to reconcile them.

Netting

- 4.269 Individual units or sectors may have the same kind of transaction both as an expenditure (debit/expenditure in balance of payments **current and capital accounts**) and as a revenue (credit/revenue in balance of payments **current and capital accounts**) (for example, they both pay and receive interest) and the same kind of financial instrument both as an asset and as a liability (for example, they may have a claim in the form of debt securities as well as a liability in the form of debt securities). Aggregations or combinations in which all elementary items are shown for their full values are called gross recordings (e.g., all interest credits/revenues are aggregated separately from all interest debits/expenditures). Aggregations or combinations whereby the values of some elementary items are offset against items on the other side of the account or which have an opposite sign are called net recordings (e.g., transactions of financial assets are netted with the transactions in liabilities of the same financial instrument).
- 4.270 The SNA/BPM recommends gross recording apart from the degree of netting that is inherent in the classifications themselves. In fact, netting is already a feature of many of the recommendations of the SNA/BPM. It mostly serves to highlight an economically important property that is not apparent from gross data.
- 4.271 Netting is implicit in various transaction categories, the most outstanding example being “changes in inventories”, which underlines the analytically significant aspect of overall capital formation rather than tracking daily additions and withdrawals. Similarly, with few exceptions, the financial account and other changes in assets accounts record increases in assets and in liabilities on a net basis, bringing out the final consequences of these types of flows at the end of the accounting period. All balancing items also involve netting. To avoid confusion, the SNA/BPM uses the words “gross” and “net” in a very restrictive sense. Apart from a few headings (“net worth”, “net lending or net borrowing” and, in the case of external accounts, “net IIP”), the SNA classifications employ the word “net” exclusively to indicate the value of variables after deduction of depreciation and depletion.
- 4.272 The external accounts follow gross recording in the current and capital accounts. For goods under merchanting, both purchases and resales of goods are shown on a gross basis, although both entries are shown under exports with a negative sign for purchases (this is elaborated further in **paragraph 10.xx, BPM7**). Gross recording is applicable in particular to income on reverse investment where the direct investment enterprise owns less than 10 percent of the voting power in the direct investor (reverse investment is described in **paragraphs 6.xx–6.xx, BPM7**). Acquisitions and disposals of non-produced, non-financial assets are recorded on a gross basis. Capital transfers receivables and payables are also recorded separately on a gross basis. Flows on transactions in non-produced, non-financial assets and capital transfers are recorded on a gross basis, because they are important in the context of cross-border analysis. At the same time, the gross recording allows the derivation of net flows, if needed, provided that a sufficient level of detail is available.
- 4.273 In the case of flows in financial assets and liabilities, the term “net” may have dual meanings (summing all debits and credits for a financial asset type or a liability type **and** netting of an asset against a liability). To avoid confusion, the following conventions are adopted:
- In the case of flows, net recording always refers to aggregations for which all debit entries of a particular asset or a particular liability are netted against all credit entries in the same asset type or in the same liability type (e.g., acquisitions of foreign currency are netted against the sales of the foreign currency; bond issues are netted against redemption of bonds).
 - When net is used together with a category of financial instrument (net financial instrument), such as “net financial derivatives,” netting of a financial asset against the same type of liability is understood.
 - Titles of some derived measures, such as “net lending/borrowing” and “net IIP”, also use the term “net” (see **paragraph 4.270 (SNA) / paragraph 3.270 (BPM)**).
- 4.274 In the case of flows of financial assets and liabilities, the terms “net changes in assets” and “net changes in liabilities” are used to reflect the nature of the financial flows. Financial flows reflect changes due to all credit and debit entries during an accounting period. That is, financial flows are recorded on a net basis separately for each financial asset and liability. The use of the terms “net changes in assets” and “net changes in liabilities” brings the financial account into line with the convention used in the accumulation accounts. These are general terms that apply to both the financial account and other changes in financial assets and liabilities account. The use of these terms also simplifies the interpretation of data. For both assets and liabilities, a positive change indicates an increase in stocks and a

negative change indicates a decrease in stocks. The interpretation of increase or decrease under the credit or debit notion, however, depends on whether the increase or decrease refers to assets or liabilities (a debit for an asset is an increase while a debit for a liability is a decrease). While the debit and credit presentation is not emphasized for financial account transactions, it is important to recognize and maintain the accounting identities; for example, a credit is always conceptually matched with a corresponding debit, the latter relating to either an increase in an asset, or reduction in a liability.

- 4.275 In some cases, a clear distinction between assets and liabilities may not be feasible (such as for financial derivatives in the form of forward contracts, which could change between assets and liabilities). In such cases, it may not be possible to apply the net recording principle, which requires separate presentation of transactions in assets and transactions in liabilities. For such financial instruments, net transactions in assets and liabilities combined may have to be recorded.
- 4.276 The external accounts follow net recording in the financial account and other changes in financial assets and liabilities account. Net recording, as explained above, means aggregations or combinations that show net changes (increases less reductions) in a particular financial asset or a liability category on the same side of the balance sheet. Financial assets (changes in financial assets) should not be netted against liabilities (changes in liabilities), except in certain circumstances as explained in [paragraph 4.275](#).
- 4.277 Transactions and other flows in financial assets and liabilities are recorded as net changes in financial assets and net changes in liabilities, respectively. The net recording principle should be applied at the lowest level of classification of financial instruments taking into account the functional, institutional sector, maturity, and currency classifications, as applicable. Generally, the net recording principle should be applied within a given standard component of assets or liabilities
- 4.278 In general, net recording of flows in financial assets and liabilities is recommended in the external accounts from both the analytical and pragmatic perspectives. Net acquisition of external financial claims and net incurrence of external liabilities are generally of more analytical interest than the gross flows. Gross reporting of data may not be possible for different classes of units and for some financial instruments. Furthermore, transactions in some financial assets and liabilities often have to be derived from balance sheet data because gross transactions are not available. Nonetheless, gross flows may be a relevant factor in analysing aspects of the payments positions or financial markets (e.g., securities transactions) of economies, and such data can be used in supplementary presentations when appropriate. For example, for direct investment, equity increases and equity decreases may be of analytical interest and may be shown separately in supplementary presentations.
- 4.279 Similar to the recording of flows of financial assets and liabilities, stocks, or positions of the same type of a financial instrument held as both a financial asset and a liability should be recorded separately, so that assets are recorded under assets and liabilities are recorded under liabilities. For example, holding of short-term debt securities as assets is presented separately from the liability for short-term debt securities.

Consolidation

- 4.280 Consolidation is a special kind of cancelling out of flows and stocks that should be distinguished from other kinds of netting. It involves the elimination of those transactions or debtor or creditor relationships that occur between two transactors belonging to the same institutional sector or subsector. Consolidation should not be seen as a sheer loss of information; it entails an elementary specification by the transaction partner. Consolidation may be most relevant for financial corporations and general government. There is more detail on this in [chapters 30 and 37](#). For certain kinds of analysis, information on the transactions of these (sub)sectors with other sectors and the corresponding “external” financial position is more significant than overall gross figures. As a rule, however, the entries in the SNA/BPM are not consolidated. Because the external accounts reflect transactions involving residents and non-residents and external financial assets and liabilities, including other flows associated with them, consolidation is not relevant for external accounts of an individual economy
- 4.281 The rule of non-consolidation takes a special form regarding the transaction categories “output” and “intermediate consumption”. These transactions are to be recorded throughout at the level of establishments. This implies specifically that the accounts for institutional sectors and for industries should not be consolidated in respect of output delivered between establishments belonging to the same institutional unit.

- 4.282 Accounts for a currency union, economic union, or other regional arrangement may be compiled by eliminating all transactions and asset-liability relationships that occur between member economies of the region. In other words, in the relevant accounts, a transaction of one economy is paired with the same transaction as recorded for another member economy and both transactions are eliminated. For example, if a unit in one economy owns a bond issued by a unit in another member economy, then the stocks of bonds held as assets and liabilities are reported excluding the matched positions between the units of the member economies. At the same time, interest receivable and payable consolidated at the regional or currency union level exclude the interest payable by residents of the debtor economy to residents of the creditor economy in the region or currency union. Similarly, sales of goods and services between consolidated economies are also eliminated. (For further information, see Appendix 3, Regional Arrangements: Currency Unions, Economic Unions, and Other Regional Statements (BPM).)

F. Symmetry of reporting

- 4.283 Symmetry of reporting by counterparties is important to ensure consistency, comparability, and analytical usefulness of national and external accounts. The quadruple-entry accounting system discussed in paragraphs 4.123–4.127 underlies symmetry of reporting. The internationally agreed guidelines for definitions, classifications, time of recording and valuation principles, and the quadruple-entry accounting system provide a basis for conceptual consistency of international reporting by both parties or economies involved in a transaction or financial position. Correct application of these guidelines and principles is important for bilateral comparisons, global balances, and regional and global aggregates. While symmetry rules apply to all financial instruments, they do not fully apply to functional categories of financial positions and transactions, as used in external accounts. For example, transactions and stocks in reserve assets are reflected in the liabilities of counterparts in the rest of the world under other functional categories, particularly portfolio and other investment.
- 4.284 National and external accounts group the flow and stock data of individual units into sectoral and national aggregates. The accounts can also be prepared for a region and the world as a whole. Without applying strict consistency rules, it would be impossible to give proper interpretation to various aggregates. These requirements apply whether or not the data consolidate flows and stocks of the units they cover, and whether or not they show any subgroups of units within the overall total. However, consolidation is clearly impossible without consistency in the basic data, and the requirements of consistency are more obvious when disaggregation of sectors is used.
- 4.285 Micro-level data on the basis of which the national and external accounts are compiled do not necessarily meet the consistency requirements needed for (inter)national accounts. Differences in valuation, timing, and classification may occur in many cases. Inconsistency in valuation may often occur for barter transactions. Different valuation bases may have been used by creditors and debtors for some financial assets, such as non-performing loans. Timing differences may occur not only due to differences in timing zones and delays in check-clearing systems, but also because units' perceptions of the timing of changes in ownership and recognition of revenues and expenditures may vary.
- 4.286 Significant achievements have been made at the national and international levels to come to more uniform business accounting standards. Accordingly, disparities between individual micro accounts have tended to fall. Business accounting standards are geared toward individual accounts, however, and therefore do not necessarily ensure consistency across units. Current business accounting standards prescribe that loans be treated differently depending on whether they appear as a credit or a debit. This approach cannot be applied in a consistent horizontal double-entry bookkeeping system. Tax and supervisory regulations are a second source for harmonization of accounting practices. In so far as these rules differentiate between specific sections of the economy, however, they also may be a cause for discrepancies between micro accounts.

Annex: Methods to value transactions and stocks

- 4.287 This annex starts with an overview of the various methods for valuing transactions, in order of preference, although not all methods are applicable for each and every type of transaction. Subsequently, the methods to value stocks of assets and liabilities are described. The latter does not concern the initial recognition, i.e., the time at which the assets enter the balance sheets, as the valuation of these flows is already covered under transactions.

Methods for valuing transactions

Observed exchange values (or observed market prices)

- 4.288 Values based on the prices actually observed in the exchange of goods, services and assets, are generally considered as the most appropriate measure in line with the valuation principles for macroeconomic statistics. From a conceptual point of view, exceptions could be made for distorted transfer prices between affiliated enterprises and concessional pricing (see paragraphs 4.147 – 4.152), although in practice adjustments are not made, mainly for reasons of feasibility and (international) consistency, and to rely on the source data provided.

Market-equivalent prices

- 4.289 In quite a number of cases, actual exchange values are not available. Market prices could then be approximated by using the prices of similar goods, services and assets. This valuation method is particularly relevant in the following areas:
- barter transactions;
 - consumption of goods produced for own final use;
 - housing services from owner-occupied dwellings; and
 - exceptional cases of own-account capital formation of assets, for which a full range of the assets are regularly traded on the market (e.g., dwellings, cloud services providers building their own servers, or other cases in which equipment is constructed by producers).
- 4.290 An important prerequisite for applying this valuation method is the homogeneity, or comparability, of the relevant goods, services and assets. Where homogeneity does not exist, it is also considered acceptable to apply, for example, hedonics to adjust for different characteristics in the goods and services under consideration, although these hedonic valuation methods may be rather complicated, requiring significant amounts of source data. Moreover, the goods, services and assets which are used to arrive at a market-equivalent price should be traded under the same market conditions as the goods, services and assets under consideration. For example, using data on rentals for dwellings, which are subsidised by government, is not considered appropriate for arriving at market-equivalent prices for owner-occupied housing services in a competitive market. Finally, the markets for the goods, services and assets which are used for the comparison should be well-established, and not too thin, which sometimes may be problematic for e.g., certain types of dwellings in the case of estimating owner-occupied housing services.

Indirect valuation

- 4.291 There are a few cases, in which the transactions have to be based on what is here referred to as an “indirect valuation” method. One example concerns the imputation of reinvested earnings. In this case, the valuation is based on the net saving of direct investment enterprises before “distribution” of the reinvested earnings. Instead of referring to this as an example of indirect valuation, one could also argue that the reinvested earnings are derived, although indirectly, from observed exchange values. Other examples of indirect valuation relate to the measurement of non-life insurance output, as the difference between premiums, including supplements, minus claims, or the derivation of implicit financial services on loans and deposits as the difference between bank interest and SNA interest. (See chapter 7 for more details.)

Sum-of costs

- 4.292 A method, which is frequently applied in the system of national accounts, is the sum-of-costs method. According to this method, it is assumed that market prices, or exchange values, can be approximated by summing up the costs of production, as follows:
- intermediate consumption;
 - remuneration of employees;
 - other taxes less subsidies on production;
 - rents payable on the use of non-produced non-financial assets;
 - depreciation and depletion; and
 - return on capital used in production.
- 4.293 This method is applied in various circumstances, in particular in the following cases:
- non-market output of government, NPISHs and the central bank;
 - own-account production of fixed assets; and
 - although less frequently, other goods produced for own final use, for which it is not feasible to make an estimate on the basis of similar goods traded on the market.
- 4.294 Regarding remuneration of employee, also the labour input of the owner of the unincorporated enterprise and his/her family members may need to be estimated. As the remuneration for this labour input is not explicitly known, because of it being implicitly included in mixed income, an estimate of the relevant labour input could be based on wage rates paid for similar types of work.
- 4.295 Regarding the extent of capital services, i.e. depreciation, depletion and return to capital, all non-financial assets used in the production of the relevant goods and services should be included, thus not only fixed assets but also inventories and non-produced non-financial assets. Having said that, one may assume that natural resources such as mineral and energy resources produced on own account are typically not used in the relevant production processes. Furthermore, in the case of measuring the output of government services, by convention, due to significant issues regarding data availability, city parks and historical monuments, and undeveloped land, are to be excluded from the scope of assets to which a return to capital should be applied.
- 4.296 For the return to capital, it is recommended to use a rate of return from an opportunity costs perspective. Such a rate could be approximated by applying a mark-up for normal net operating surplus. A more prudent approach is to use a rate based on the interest rate paid for the borrowing of funds, which may differ across institutional sectors and/or industries, given differences in the perceived risks attached to borrowing funds to the relevant economic agents. The latter approach would be preferable for non-market producers, who do not aspire to make profits.
- 4.297 Beyond the integrated framework of national accounts, the sum-of-costs is also often used for valuing the output of unpaid household services for own final use. Here, the conceptually preferable option for valuation is to look at the market prices of similar goods and services, but it may not be that easy to find relevant information on the quantities of the services produced, and also to collect data on comparable services produced for the market, adequately adjusted for quality and productivity. For these reasons, in practice, the output of these services produced by households for own final use is valued using the sum-of-costs approach.
- 4.298 Importantly, when applying the sum-of-costs method for unpaid household services, a value for the labour input, adequately adjusted for quality and productivity, has to be imputed. An issue is whether to estimate the labour input with replacement costs (i.e., the labour costs of similar occupations in the market) or with opportunity costs (i.e., the costs foregone when producing unpaid household services). The latter may be relevant in the case a household is unconstrained in its allocation of time between selling its labour services and other usages of time, and/or in the case one wants to arrive at a welfare-measure of consumption. For this reason, the use of replacement costs is

considered the most appropriate way of valuation for arriving at an approximation of the market price, consistent with the national accounts.

Short summary of methods for valuing transactions

4.299 Apart from the relatively exceptional case of indirect valuation, the preferred methods for valuing transactions can be summarised as follows:

- In the case of goods, services and assets, which are transacted on the market via monetary settlement, the values actually exchanged are the basis for valuation.
- In the case of goods, services and assets, which are transacted via barter type, and also the consumption of goods produced for own final use, usually prices can be derived from market transactions of similar goods, services and assets.
- In the case of unpaid household services produced for own final use, a distinction should be made between housing services from owner-occupied dwellings, which are included in the production boundary of the SNA versus other services which are not included in the production boundary:
 - For the former services, the preferred method is to use market-equivalent prices which can be derived from market transactions of similar services. However, as this often concerns relatively heterogeneous products and assets, adequate adjustments need to be made to account for this heterogeneity.
 - For the other unpaid household services, market-equivalent prices may also be used. However, as it may be hard to find relevant data on the quantities of services provided, the default option is to use the sum-of-costs method.
- In the case of own-account capital formation of assets, the default option is the application of the sum-of-costs method. However, when the assets are relatively homogeneous and regularly traded on the market (e.g., dwellings), preference is given to market-equivalent prices, adequately adjusted for heterogeneity.
- Finally, in the case of non-market output of government and NPISHs, output and final consumption should be valued by using the sum-of-costs method.

Methods for valuing stocks of assets and liabilities

4.300 In discussing each of the valuation methodologies for the valuation of stocks of assets and liabilities, a distinction is made between non-financial assets and financial assets, as the relevance of the various methodologies can differ quite significantly for these two types of assets. Moreover, when it comes to the valuation of financial instruments, it should be noted that the consistency in valuing assets and liabilities is an important prerequisite in the system of national accounts.

Observed market prices

4.301 The most obvious way to arrive at current (market) prices for positions recorded on the balance sheet at a certain point in time is the use of prices observed in the market. Preferably, the relevant markets should be trading in considerable volumes, with prices listed at regular intervals. However, if traded from time to time, recent market transactions could also be used as an approximation of the current market price.

4.302 Unfortunately, this valuation method, which is preferable from a conceptual point of view, can only be applied in a limited number of cases, mainly relating to financial assets, first and foremost for securities traded on a market, like the stock exchange, in which each asset traded is completely homogeneous, is often traded in considerable volume, and has its market price listed at regular intervals. It should also be noted that for debt securities, users often request supplementary information on the nominal value (see below) of the liabilities, in addition to the valuation at market prices. For example, in the case of government debt, the principal method of valuation is at nominal value, as this reflects, in addition to accrued interest, the actual repayments to be made in the future.

- 4.303 As already noted, this valuation method is conceptually sound, provided that the relevant assets are (relatively) homogenous, and regularly traded in active markets with regular price quotations. If the latter conditions are not met, other valuation methods may need to be applied.

Market-equivalent prices

- 4.304 The alternative for directly observed prices is to approximate current prices by using observable market prices of similar assets. This valuation method could also include expert estimates, which are typically based on information from the market as well.
- 4.305 Valuing assets at market-equivalent prices can be applied for less homogenous non-financial assets which are regularly traded on the market, such as dwellings and certain types of generic (second-hand) transport equipment. Of importance, especially in the case of dwellings, is the need to account for the various characteristics which are relevant for the market price setting. Moreover, it is important to realise that the market prices of dwellings and other real estate are a combination of the structure and the underlying land, which is less suitable for national accounts, in which these two elements are separated. Notwithstanding this separate recording, market prices could be used as a benchmark for arriving at appropriate estimates for the sum of the two elements. For more details, see the [Eurostat-OECD Compilation Guide on Land Estimations](#).
- 4.306 Expert estimates made for insurance purposes, for tax purposes, etc. may be the only viable option for valuing valuables, unless the valuable has been acquired relatively recently. In addition, expert estimates could also provide a source of information for valuing real estate in the absence of appropriate markets.
- 4.307 This valuation method may become less appropriate in the case of second-hand “special purpose” fixed assets, and/or in the case the markets are relatively thin. A combination of these two elements may lead to a market price close to scrap value, not representing the value of such an asset used in an enterprise as a going concern. Valuation according to the written-down replacement costs (see below) is then considered more appropriate.

Valuation based on past expenses

- 4.308 If market(-equivalent) prices are not available, the next best method to arrive at an appropriate value for assets is a valuation based on past expenses. Here, one can distinguish two basic methods, depending on whether or not the assets in question are subject to depreciation: (i) historical acquisition price; and (ii) written-down replacement costs. The costs in the case of the latter method do not only concern direct expenditures on purchases of capital goods, but may also relate to expenditures made for the own-account production of fixed assets, typically valued using the sum-of-costs method.
- 4.309 A valuation of assets based on past expenses can be applied to a considerable number of assets, but in practice it is most often used in the case of non-financial assets. The use of the first method could be used for e.g., the valuation of valuables, but it may also be a valid alternative for some financial instruments. However, in case the acquisition has taken place further in the past, the acquisition price may need to be adjusted for price changes, certainly in cases where significant price changes have been observed in the period since the acquisition.
- 4.310 The second method is most commonly used for valuing fixed assets, through the application of the perpetual inventory method. The method can be considered superior to market(-equivalent) prices, if the market prices for second-hand assets cannot be considered as representative for the future capital services, which can be derived from the continued use of the asset in production. A problem in the application of this method relates to the information needed for the application of this estimation method. Most importantly, apart from long time series on past expenditures on the purchases, including price developments, of the assets in question, information is needed on the service life; the age-price or the age-efficiency profile; and discard patterns. More detailed guidance is provided in the [OECD Manual on Measuring Capital \(2009, 2nd edition\)](#)

Nominal value

- 4.311 Valuation at nominal values is typically applied to financial instruments which are not traded via markets, such as deposits, loans and other accounts receivable/payable. Nominal value at any moment in time reflects the value of the instrument at creation and subsequent economic flows, such as transactions, holding gains and losses other than

market price changes, and other volume changes. It typically comprises the outstanding principal amount including any accrued interest.

- 4.312 Nominal value should be distinguished from such notions as fair value, amortized value, face value, book value, and historic cost.
- a. Fair value is a market-equivalent value. It is defined as the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction. It thus represents an estimate of what could be obtained if the creditor had sold the financial claim.
 - b. Amortized value reflects the amount at which the financial asset or liability was measured at initial recognition minus the principal repayments. Excess payments over the scheduled principal repayments reduce the amortized value whereas payments that are less than the scheduled principal repayments or scheduled interest increase the amortized value. On each scheduled date, amortized value is the same as nominal value, but it may differ from the nominal value on other dates due to the accrued interest being included in the nominal value.
 - c. Face value is the undiscounted amount of principal to be paid to the holder at maturity. It is also known as "par value" or simply "par." Before maturity, the market value of a bond may be greater or less than face value, depending on the interest rate payable and the perceived risk of default. As bonds approach maturity, market value approaches face value. For example, if interest rates are higher than the bond's coupon rate, then the bond is sold at a discount (below par). Conversely, if interest rates are lower than the bond's coupon rate, then the bond is sold at a premium (above par).
 - d. Book value in business accounts generally refers to the value recorded in the enterprise's records. Book values may have different meanings because their values are influenced by timing of acquisition, company takeovers, frequency of revaluations, and tax and other regulations.
 - e. Historic cost, in its strict sense, reflects the cost at the time of acquisition, but sometimes it may also reflect occasional revaluations.
- 4.313 The use of nominal value is partly influenced by pragmatic concerns about data availability and the need to maintain symmetry between debtors and creditors. In addition, because loans are not intended for negotiability, without an active market, estimating a market price can be somewhat subjective. Nominal value is also useful because it shows actual legal liability and the starting point of creditor recovery behaviour. In some instances, loans also may be traded, often at discount, or a fair value may exist or would be possible to estimate. It is recognised that nominal value provides an incomplete view of the financial position, particularly when the loans are non-performing. Therefore, it is recommended to include, as a supplementary item, information on the nominal value of non-performing loans. Loans that have become negotiable de facto should be reclassified under debt securities.

Indirect valuation

- 4.314 Financial assets and related liabilities can also be approximated with a method which could be referred to as "indirect valuation". This method is often applied for unlisted equity. In this case, the intrinsic value of a corporation is considered a valid starting point for the valuation of the equity invested, More guidance on the valuation of unlisted equity, including alternative methods, is provided in chapter 14.

Net present value of future returns

- 4.315 In cases that the above valuation methods cannot be applied, the (net) present value of future benefits is considered as a viable alternative. This method is typically used in the following areas:
- defined benefit pension entitlements;

- unlisted equity in the case other methods are considered less appropriate; and
 - natural resources.
- 4.316 The details of actuarial methods for estimating pension entitlements are not further elaborated here. Extensive guidance is available elsewhere, see e.g., [Technical Compilation Guide for Pension Data in National Accounts](#). For estimating the value of unlisted equity using the present value of (expectations about) future profits, reference is made again to chapter 14.
- 4.317 For natural resources, and possibly other non-financial assets, the method comes down to estimating the discounted value of future benefits derived from these assets, which often need to be approximated by the so-called “residual value method”, calculated using the following formula:
- output at basic prices (related to the extracted resources)
- less
- intermediate consumption
 - remuneration of employees
 - other taxes less subsidies on production
- equals
- gross operating surplus
- plus
- specific taxes less subsidies on extraction
- equals
- gross operating surplus for the derivation of resource rent
- less
- depreciation
 - return to capital used in production
- equals
- resource rent (= depletion plus return to natural resource)
- 4.318 In the case of non-financial assets, using the method of the present value of future benefits can only be used if there is a direct link between the future benefits and the asset in question, in the sense that one can assume that there are no other assets which may have generated the residual income. Furthermore, it requires forecasting a future path of income streams, which may be quite challenging. For this purpose, assumptions need to be made on the asset life; the future path of extractions and, in the case of renewable resources, the regeneration potential of the asset in question; and the expected flows of income associated with the extractions. The question of which discount rate is appropriate in which circumstances is also an important question to answer. Because of these issues, the method is often considered as a last resort option, to be applied only for certain classes of assets, such as natural resources.
- 4.319 Another issue, alluded to in section E of this chapter, concerns the way in which the ownership of the natural resources is accounted for. Often government, usually the legal owner of mineral and energy resources, provides extraction rights to private corporations, for a series of annual payments of royalties, either or not paid in advance for a certain period of time. In doing so, the government may not appropriate the full resource rent that can be derived from the relevant resource by the extractor. Moreover, as these rights are often not transferable, so without a price being established in a market, there is no observable value of the rights. However, the private corporation as a going concern still derives value from having the rights to extract, in the form of part of the resource rents being appropriated. It is therefore recommended to apply the split-asset approach, according to which the assets in question are recorded in the accounts of the legal owner and the extractor, in proportion to the share of the resource rent appropriated.
- 4.320 More detailed guidance on the recording and compilation of estimates for natural resources is provided in the SEEA 2012 Central Framework, as well as the [forthcoming compilation guidance developed by the OECD Expert Group on Natural Capital](#).

- 4.321 The method of the (net) present value of future benefits could be applied to other types of assets as well. However, in these cases, the written-down replacement costs method is usually to be preferred. This also holds for assets produced in-house, the past investment expenditures of which are often on the sum-of-costs method.
- 4.322 Going beyond the sequence of economic accounts, the (net) present value method could also be applied for estimating the value of human capital. Again the choice is between this method and the written-down acquisition costs. Both methods have their advantages and disadvantages. Regarding the latter method, the relevant expenditures may be relatively easy to collect. However, service lives and depreciation patterns will have to rely on a set of assumptions. Another complication is the measurement of unpaid labour input (e.g., studying at home), which would need to rely on the income foregone. For the application of the (net) present value method, one needs to agree on which income to use, in addition the more general complexities of forecasting the future incomes, in this case over quite lengthy periods of time. In the end, no firm recommendation is made on the preferred method, before having gained more practical experience on the application of both methods. See chapter 34 for a more detailed discussion of human capital.

Short summary of methods for valuing stocks of assets and liabilities

- 4.323 In summary, the following can be noted in relation to the valuation of assets and liabilities, thereby distinguishing between financial assets and liabilities versus non-financial assets.
- 4.324 In the case of financial assets and corresponding liabilities, market(-equivalent) prices are the preferable option for valuation. However, its application is relatively limited, as most financial instruments are non-negotiable and not traded on active markets with regular price quotations, the obvious exception relating to tradable securities. For non-negotiable financial instruments, one could use market prices from recent market transactions. However, as this methodology cannot generally be applied, a valuation at nominal values is considered the most viable option. A special case is unlisted equity, for which various methodologies can be considered; see chapter 14 (SNA) / chapter 7 (BPM). Another exception concerns the estimation of defined benefit pension entitlements, which are based on actuarial type of calculations using the net present value of future benefits.
- 4.325 For non-financial assets, in the absence of market(-equivalent) prices, two valuation methods are applied most frequently, either the written-down replacement cost method or the (net) present value of future earnings. The former method is typically applied to fixed assets used in the production of goods and services, while the latter method is often the only alternative for arriving at an approximation of the value of natural resources. In addition, expert estimates may be the only viable option for estimating the value of valuables.

Chapter 4. Institutional Units; and Sectors, Economic Territory, and Residence

(Joint SNA/BPM chapter – Update to *BPM6* Chapter 4)

Chapter 5 (2025 SNA) / Chapter 4 (*BPM7*): Institutional units and sectors, economic territory and residence

(Update to 2008 SNA Chapter 4: Institutional units and sectors / *BPM6* Chapter 4: Economic Territory, Units, Institutional Sectors, and Residence)¹¹

A. OVERVIEW




5.1 This chapter is concerned with the definition and description of institutional units and the way in which they are grouped to make up the sectors and subsectors in macroeconomic statistics. This section discusses the key concepts of an institutional unit, its residence and the economic territory. This is followed by the main principles for allocating institutional units to institutional sectors. In addition, attention is paid to the concept of population. Section B provides further guidance on corporations, while section C deals with non-profit institutions. Sections D – H provides more details on the main institutional sectors, including the subsectors distinguished, as follows: non-financial corporations (D), financial corporations (E), general government (F), households (G) and non-profit institutions serving households (H). The chapter ends with some details about the rest of the world, i.e., the accounts for transactions and positions between residents and non-residents, while section J contains more detailed guidance related to the concepts of economic territory and residence.

1. INSTITUTIONAL UNITS

5.2 An institutional unit is an economic entity that is capable, in its own right, of owning assets, incurring liabilities and engaging in economic activities and in transactions with other entities. The main attributes of institutional units may be described as follows:

- a. An institutional unit is entitled to own assets in its own right; it is therefore able to exchange the ownership of assets in transactions with other institutional units;

¹¹ The chapter is drafted as a joint SNA/BPM chapter following the structure of 2008 SNA Chapter 4. After global consultation and approval by the AEG/BOPCOM, only those issues that are relevant from the external sector statistics perspective will be included in *BPM7*; likewise, only those issues that are relevant to national accounts will be included in the 2025 SNA.

- b. It is able to take economic decisions and engage in economic activities for which it is itself held to be directly responsible and accountable at law;
 -  c. It is typically able to incur liabilities on its own behalf, to take on other obligations or future commitments and to enter into contracts;
 - d. Either a complete set of accounts, including a balance sheet of assets and liabilities, exists for the unit, or it would be possible and meaningful, from an economic viewpoint, to compile a complete set of accounts if they were to be required.
- 5.3 There are two main types of units in the real world that may qualify as institutional units, namely persons or groups of persons in the form of households, and legal or social entities.
-  5.4 For the purpose of macroeconomic statistics, a household consists of a single person having a separate living accommodation, or a group of persons who share the same living accommodation, who pool some, or all, of their income and wealth and who consume certain types of goods and services collectively, mainly housing and food. In addition to individual households, there are units described as institutional households that comprise groups of persons staying in hospitals, retirement homes, convents, prisons, etc. for long periods of time.
- 5.5 The individual members of multiperson households are not treated as separate institutional units. Many assets are owned, or liabilities incurred, jointly by two or more members of the same household while some or all of the income received by individual members of the same household may be pooled for the benefit of all members. Moreover, many expenditure decisions, especially those relating to the consumption of food, or housing, may be made collectively for the household as a whole. It may be impossible, therefore, to draw up meaningful balance sheets or other accounts for members of the household on an individual basis. For these reasons, the household as a whole rather than the individual persons in it must be treated as the institutional unit. Also, members of institutional households are not treated as separate institutional units, if they have little or no autonomy of action or decision in economic matters.
- 5.6 The second type of institutional unit is a legal or social entity that engages in economic activities and transactions in its own right, such as a corporation, non-profit institution (NPI) or government unit. A legal or social entity is one whose existence is recognized by law or society independently of the persons, or other entities, that may own or control it. Such units are responsible and accountable for the economic decisions or actions they take, although their autonomy may be constrained to some extent by other institutional units; for example, legally constituted corporations are ultimately controlled by their shareholders. Some unincorporated enterprises belonging to households or government units may behave in much the same way as legally constituted corporations, and such entities are treated as quasi-corporations when they have complete sets of accounts.
- 5.7 In the legal sense, corporations may be described by different names: corporations, incorporated enterprises, public limited companies, public corporations, private companies, joint-stock companies, limited liability companies, limited liability partnerships, and so on. Conversely, some legal entities that are non-profit institutions may sometimes be described as “corporations”. The status of an institutional unit cannot always be inferred from its name, and it is necessary to examine its objectives and functions. In macroeconomic statistics, the term corporation covers legally constituted corporations and also cooperatives, limited liability partnerships, notional resident units and  quasi-corporations. The description of these various institutional units is given in section B.

- 5.8 Non-profit institutions (NPIs) are legal or social entities created for the purpose of producing goods and services but whose status does not permit them to be a source of income, profit or other financial gain for the units that establish, control or finance them. In practice, their productive activities are bound to generate either surpluses or deficits but any surpluses they happen to make cannot be appropriated by other institutional units. The articles of association by which they are established are drawn up in such a way that the institutional units that control or manage them are not entitled to a share in any profits or other income they generate. For this reason, they are frequently exempted from various kinds of taxes. A description of the treatment of NPIs within macroeconomic statistics is given in section C.
- 5.9 Government units are unique kinds of legal entities established by political processes that have legislative, judicial or executive authority over other institutional units within a given area. Viewed as institutional units, the principal functions of government are to assume responsibility for the provision of goods and services to the community or to individual households and to finance their provision out of taxation or other incomes; to redistribute income and wealth by means of transfers; and to engage in non-market production.

Box x.x Establishments and enterprises

Establishments

An establishment is an enterprise, or part of an enterprise, that is situated in a single location and in which only a single productive activity is carried out or in which the principal productive activity accounts for most of the value added. The breaking up of enterprises into one or more establishments is useful because some enterprises are large and complex, with different kinds of economic activity undertaken in different locations. The establishment is particularly useful as a unit for production statistics. Because the establishments of a multi establishment enterprise are part of the same legal entity, financial transactions and positions cannot always be attributed to a particular location or activity, so the use of the institutional unit concept is appropriate for statistics covering financial transactions and positions, such as sector's financial balance sheets, the balance of payments and IIP.

Enterprises

An enterprise is defined as an institutional unit engaged in production. Investment funds and other corporations or trusts that hold assets and liabilities on behalf of groups of owners are also enterprises, even if they are engaged in little or no production. (As discussed in paragraphs 10.124–10.125, institutional units that hold assets on behalf of their owners are providers of financial services to their owners.) An enterprise may be a corporation, a nonprofit institution, or an unincorporated enterprise (including a quasi-corporation). Corporate enterprises and nonprofit institutions are complete institutional units. An unincorporated enterprise, however, refers to a part of an institutional unit—a household or government unit—only in its capacity as a producer of goods and services.

Local and global enterprise groups

Groups of enterprises are sometimes identified in defining and classifying direct investment. Although enterprises are the basic unit of economic statistics, a single owner or group of owners may have control of more than one enterprise, so they may act in a concerted way and the transactions between the enterprises may not be driven by the same concerns as “arm’s-length” transactions, that is, those with unrelated enterprises.

Enterprise groups may be either global or local. A global enterprise group refers to the multinational enterprise (MNE) and the set of legal entities—regardless of their economies of residence—that are under the control of the same ultimate controlling parent (MNE is the ultimate controlling parent—see paragraph 5.38); whereas the local (or territory-specific) enterprise group refers to an investor and the legal entities under that investor that are resident in the reporting economy. Business accounting may cover groups of related corporate entities (consolidated accounts) including entities that are resident in different economies. However, entities in different economies are not aggregated for macroeconomic statistics that have a focus on an economy. The concepts of global enterprise groups and local enterprise groups are used in the *OECD Benchmark Definition of Foreign Direct Investment*. The global enterprise group is also called a multinational enterprise group.

Local enterprise groups may be used for compiling and presenting direct investment statistics. For example, if direct investment is initially channelled to a holding company and then on to a manufacturing subsidiary, then it may shed light to classify the direct investment in manufacturing rather than in a holding company operation, which is just the initial investment. The implications of combining entities in different institutional sectors need to be carefully considered.

2. POPULATION

- 5.10 In the context of national accounts, data on population are important for deriving per capita figures for aggregates such as GDP and NDP. They also constitute the main elements for defining households. ***The population of a country is most simply defined as all those persons who are resident in the economic territory at a given point in time.*** In this definition, the SNA and BPM concept of residence is used, that is persons are resident in the country where they have the strongest links thereby establishing a centre of predominant economic interest. Generally, the criterion would be based on their intended country of residence for one year or more. In most cases, the concept of residence is straightforward, being based on the dwelling a person occupies on a permanent basis, although there are some borderline cases.
- 5.11 Generally, persons who are resident in a country for one year or more, regardless of their citizenship, should be included in the population measure. An exception is foreign diplomatic personnel and defence personnel, together with their families, who should be included as part of the population of their home country. The “one-year rule” means that usual residents who are living abroad for less than one year are included in the population but foreign visitors (for example, holidaymakers) who are in the country for less than one year are excluded from the measured population. Further elaboration on the application on the residence criterion in special cases is given in section J.
- 5.12 Annual population is typically estimated from less frequent population censuses. Censuses usually count the number of people present on a specified night or the number of people who usually live in a dwelling, even if they are not present when the census is enumerated. However, a census is often conducted only every five or ten years and sometimes less frequently. In years between censuses, updated information on the population of a country is provided by sample-based surveys and by drawing on information on births and deaths and on net migration.

3. RESIDENCE AND ECONOMIC TERRITORY

- 5.13 ***The residence of each institutional unit is the economic territory with which it has the strongest connection, in other words, its centre of predominant economic interest.*** The

- concept of economic territory is consistent across macroeconomic statistics. Some key features are as follows. In its broadest sense, an economic territory can be any geographic area or jurisdiction for which statistics are required. The connection of entities to a particular economic territory is determined from aspects such as physical presence and being subject to the jurisdiction of the government of the territory. The most commonly used concept of economic territory is the area under the effective economic control of a single government. However, economic territory may be larger or smaller than this, as in a currency or economic union or a part of a country or the world.
- 5.14 The economic territory includes the land area, airspace, territorial waters, including jurisdiction over fishing rights and rights to fuels or minerals. In a maritime territory, the economic territory includes islands that belong to the territory. The economic territory also includes territorial enclaves in the rest of the world. These are clearly demarcated land areas (such as embassies, consulates, military bases, scientific stations, information or immigration offices, aid agencies, central bank representative offices with diplomatic immunity, etc.) located in other territories and used by governments that own or rent them for diplomatic, military, scientific, or other purposes with the formal agreement of governments of the territories where the land areas are physically located. More detailed guidance on economic territory is provided in section J.
- 5.15 Economic territory has the dimensions of physical location as well as legal jurisdiction. The concepts of economic territory and residence are designed to ensure that each institutional unit is a resident of a single economic territory. The use of an economic territory as the scope of economic statistics means that each member of a group of affiliated enterprises is resident in the economy in which it is located, rather than being attributed to the economy of location of the head office.
- 5.16 In general, an institutional unit is resident in one and only one economic territory determined by the unit's centre of predominant economic interest. Exceptions may be made for multiterritory enterprises that operate a seamless operation over more than one economic territory. Although the enterprise has substantial activity in more than one economic territory, it cannot be broken up into separate branches or a parent and branch(es) because it is run as an indivisible operation with no separate accounts or decisions. Such enterprises are typically involved in cross-border activities and include shipping lines, airlines, hydroelectric schemes on border rivers, pipelines, bridges, tunnels and undersea cables. If it is not possible to identify a parent or separate branches, it is necessary to prorate the total operations of the enterprise into the individual economic territories. For more information on these special cases, refer to paragraphs 5.72-5.75.
- 5.17 An institutional unit has a centre of predominant economic interest in an economic territory when there exists, within the economic territory, some location, dwelling, place of production, or other premises on which or from which the unit engages and intends to continue engaging, either indefinitely or over a finite but long period of time, in economic activities and transactions on a significant scale. The location need not be fixed so long as it remains within the economic territory. The actual or intended location for one year or more is used as an operational definition; while the choice of one year as a specific period is somewhat arbitrary, it is adopted to avoid uncertainty and facilitate international consistency.
- 5.18 The concept of residence is consistent across macroeconomic statistics. Some key consequences follow:
- a. The residence of individual persons is determined by that of the household of which they form part and not by their place of work. All members of the same household have the same residence as the household itself, even though they may cross borders to work or otherwise spend periods of time

abroad. If they work and reside abroad so long (usually taken to be one year or more) that they acquire a centre of economic interest abroad, they cease to be members of their original households;

- b. Unincorporated enterprises that are not quasi-corporations are not separate institutional units from their owners and, therefore, have the same residence as their owners;
- c. Corporations and NPIs may normally be expected to have a centre of economic interest in the economic territory in which they are legally constituted and registered. Corporations may be resident in economic territories different from their shareholders and subsidiary corporations may be resident in economic territories different from their parent corporations. When a corporation, or unincorporated enterprise, maintains a branch, office or production site in another economic territory in order to engage in production over a long period of time (usually taken to be one year or more) but without creating a subsidiary corporation for the purpose, the branch, office or site is considered to be a quasi-corporation (that is, a separate institutional unit) resident in the economic territory in which it is located;
- d. Owners of land and other natural resources, buildings and immovable structures in the economic territory of a country, or units holding long leases on either, are deemed always to have a centre of economic interest in that country, even if they do not engage in other economic activities or transactions in the country. All land and other natural resources, buildings and immovable structures are therefore owned by residents. If the legal owner is actually non-resident, an artificial unit, called a notional resident unit, is created for statistical purposes (see paragraphs 5.65-5.71);
- e. Extraction of subsoil resources and exploitation of licenses can only be undertaken by resident institutional units. An enterprise that will undertake extraction is deemed to become resident when the requisite licences or leases are issued, if not before (such as in the case of exploration licenses);
- f. For entities such as many special purpose units/vehicles, that have few if any attributes of location, the location is determined by their place of incorporation (see paragraphs 5.86 and 5.87).

Further elaboration of the concept of residence for a number of borderline cases is given in section J.

4. SECTORING AND ECONOMIC BEHAVIOUR

5.19 The institutional sectors of the SNA/BPM group together similar kinds of institutional units. Corporations, NPIs, government units and households are intrinsically different from each other in that their economic objectives, functions and behaviour are different.

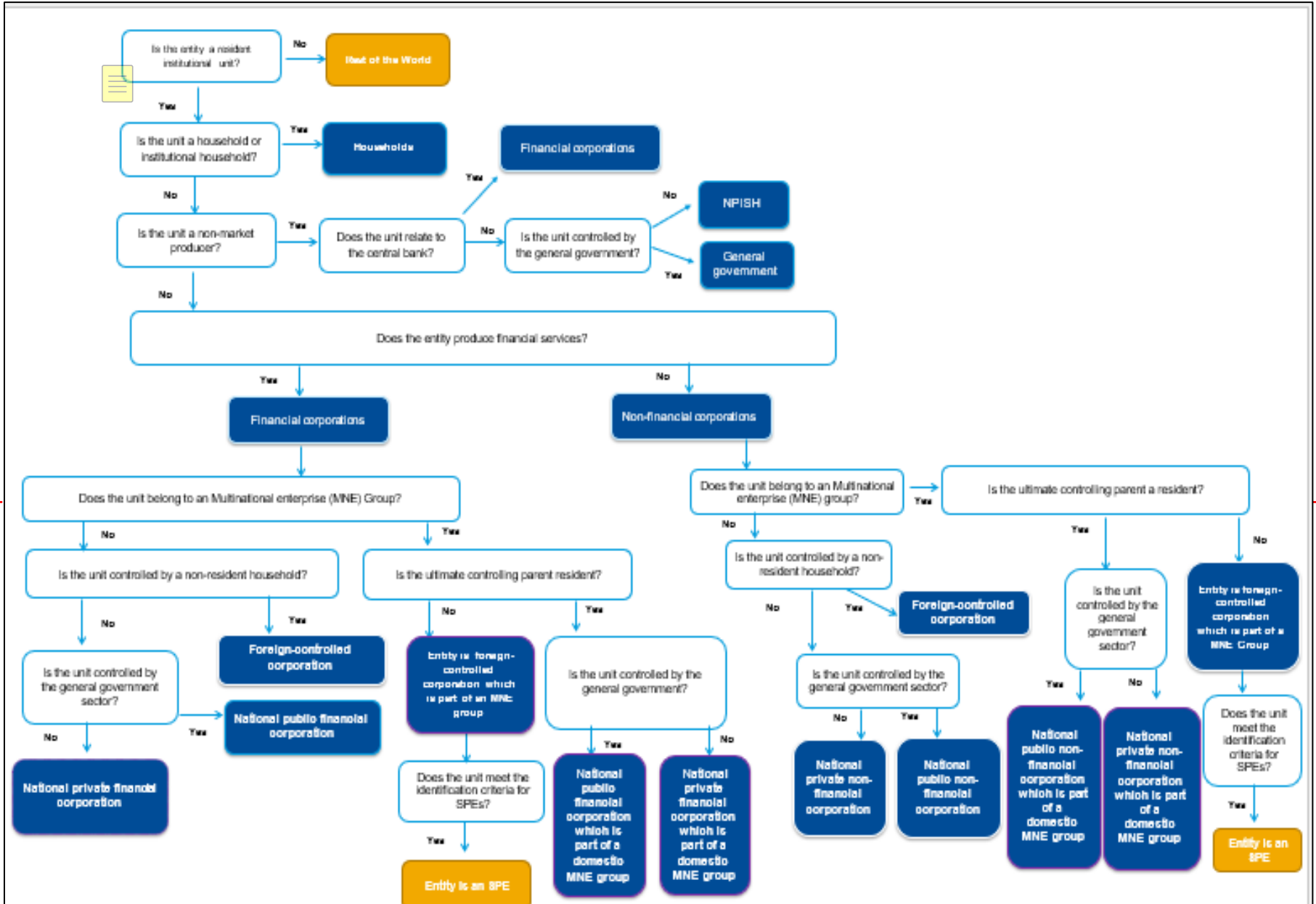
5.20 Institutional units are allocated to sector according to the nature of the economic activity they undertake. The three basic economic activities recorded in the SNA are production of goods and services, consumption to satisfy human wants or needs and accumulation of various forms of capital. Corporations, with the exception of the central bank, undertake either production or accumulation (or both) but do not undertake (final) consumption. Government as well as the central bank undertake production (but mainly of a different type from corporations), accumulation and final consumption on behalf of the population. All households undertake consumption on their own behalf and may also engage in production and accumulation. NPIs are diverse in nature. Some behave like corporations, some are effectively part of government and some undertake activities similar to government but independently of it.

- 5.21 Fundamental to the distinction between corporations and government is the basis on which production is undertaken. Corporations, again with the exception of the central bank, produce for the market and aim to sell their products at economically significant prices. Prices are said to be economically significant if they have a significant effect on the amount that producers are willing to supply and the amounts purchasers wish to buy. These prices normally result when the producer has an incentive to adjust supply either with the goal of making a profit in the long run (or at a minimum, covering capital and other costs) and consumers have the freedom to purchase or not purchase and make the choice on the basis of the prices charged. There is extensive discussion on the definition of economically significant prices and the meaning of market and non-market production in chapters 7 and 30.
- 5.22 Corporations are divided between those mainly providing financial services and those mainly providing goods and other services. The two groups are known as financial corporations and non-financial corporations respectively. The distinction is made because of the special role that financial corporations play in the economy.
- 5.23 The economic objectives, functions and behaviour of government units are quite distinct. They organize and finance the provision of goods and services, to individual households and the community at large and therefore incur expenditures on final consumption. They may produce most of these goods and services themselves but the products are usually either provided free or at prices determined by considerations other than purely market forces. Although classified as a financial corporation, the same holds for the central bank. Government units are also concerned with distribution and redistribution of income and wealth through taxation and other transfers. Government units include social security funds.
- 5.24 The economic objectives, functions and behaviour of households are different again. Although primarily consumer units, they can also engage in production. Often this production activity is relatively small scale and includes informal and subsistence activities. When the production units of households are not legal entities (and cannot be treated as such), they are described as unincorporated enterprises. They remain part of the same institutional unit as the household to which they belong.
- 5.25 NPIs are institutional units created for the purpose of producing or distributing goods or services but not for the purpose of generating any income or profit for the units that control or finance them. Nevertheless, some NPIs deliver goods and services to customers at economically significant prices and, when they do, these NPIs are treated in the same way as corporations in macroeconomic statistics. Other NPIs that produce goods and services but do not sell them at economically significant prices are either government units, if controlled by government, or they are treated as a special group of units called non-profit institutions serving households (NPISHs). The latter units are in effect non-governmental social institutions.
- 5.26 The digitalization of economic activities (e.g., financial/non-financial services) has a significant impact on the way in which these activities are performed. Apart from the emergence of new products, such as the services of digital intermediation platforms, cloud computing, etc., this phenomenon does not affect the classification of economic activities into institutional (sub)sectors and industries. Relevant units should continue to be classified in line with their economic objectives, functions and behaviour. The same holds for the classification of units involved in economic activities arising from technological innovations in the financial corporations sector, often referred to as Fintech. Chapter 22 SNA/Chapter 16 BPM contains a more extensive discussion on the impact of digitalization for the measurement of the economy.

5. THE TOTAL ECONOMY

- 5.27 ***The total economy is defined as the entire set of resident institutional units.*** The resident institutional units that make up the total economy are grouped into five mutually exclusive institutional sectors. Sectors are groups of institutional units and the whole of each institutional unit must be classified to one or other sector of the SNA. The full sequence of economic accounts of the SNA may be constructed for a single institutional unit or a group of units. The attributes of an institutional unit described in **paragraph 5.2** explain why it is not possible to compile a full set of accounts for only part of a unit. However, it is possible, useful and common practice to compile some accounts for sub-divisions of corporations, discriminating on the basis of the type of production the parts undertake. This is the subject of chapter 6. For the present chapter attention focuses on the allocation of complete units to one sector or another.

Figure 5.1 (2025 SNA)/Figure 4.1 (BPM7): Illustrative allocation of units to institutional sectors (= Figure 4 from Guidance Note G.2, also reflecting changes in the treatment of the central bank)



6. AN OVERVIEW OF INSTITUTIONAL SECTORS

5.28 All resident institutional units are allocated to one and only one of the following five institutional sectors:

The non-financial corporations sector;

The financial corporations sector;

The general government sector;

The non-profit institutions serving households sector;

The households sector.

5.29 The conceptual basis for the allocation of a unit to the appropriate sector can be seen in the top half of figure 5.1 (i.e., above the horizontal dotted line). The boxes for the sectors of the total economy, plus the box for the rest of the world, appear with double borders. Once non-resident units and households are set aside, only resident legal and social entities remain. Three questions determine the sectoral allocation of all such units. The first is whether the unit is a market or non-market producer. This depends on whether the majority of the unit's production is offered at economically significant prices or not. Due to its important role in the financial system, an exception to this general rule is made for the central bank. Although predominantly producing non-market services, the central bank is grouped together with market producers of financial services.

5.30 The second question determining sectoral allocation applies to non-market units other than the central bank, all of which are allocated either to general government or to the NPISH sector. The determining factor is whether the unit is part of, or controlled by, government. The criteria to establish control are discussed in section C below.

5.31 The third question determining sectoral allocation applies to market units, and also the central bank, all of which, including market NPIs, are allocated to either the non-financial corporations sector or the financial corporations sector. In the context of sectors as elsewhere in macroeconomic statistics, the term "corporation" is used to encompass all market producers, including cooperatives, limited liability partnerships, notional resident units and quasi-corporations as well as legally constituted corporations.

5.32 The non-financial corporations sector includes non-profit institutions (NPIs) engaged in the market production of goods and non-financial services: for example, hospitals, schools or colleges that charge fees that enable them to recover their current production costs, or trade associations financed by subscriptions from non-financial corporate or unincorporated

- enterprises whose role is to promote and serve the interests of those enterprises. The non-financial corporations sector is described further [in section D](#).
- 5.33 The financial corporations sector includes the central bank and all resident corporations whose principal activity is providing financial services including financial intermediation, insurance and pension fund services, and units that provide activities that facilitate financial intermediation. In addition, the sector includes NPIs engaged in market production of a financial nature such as those financed by subscriptions from financial enterprises whose role is to promote and serve the interests of those enterprises. The financial corporations sector is described further [in section E](#).
- 5.34 The general government sector consists mainly of central, state and local government units together with social security funds imposed and controlled by those units. In addition, it includes all non-market producers that are controlled by government units or social security funds.
- 5.35 The non-profit institutions serving households sector consists of all resident NPIs, except those controlled by government, that provide non-market goods or services to households or to the community at large.
- 5.36 The households sector consists of all resident households. These include institutional households made up of persons staying in hospitals, retirement homes, convents, prisons, etc. for long periods of time. It is noted that the institutions where these persons are staying (e.g., hospitals, retirements homes, prisons) generally constitute separate institutional units, different from the institutional households. Furthermore, as already noted, an unincorporated enterprise owned by a household is treated as an integral part of the latter and not as a separate institutional unit unless the accounts are sufficiently detailed to treat the activity as that of a quasi-corporation.
7. SUBSECTORS
- 5.37 Each of the five institutional sectors listed above may be divided into subsectors. No single method of subsectoring may be optimal for all purposes or all countries, so that alternative methods of subsectoring are recommended for certain sectors. Dividing the total economy into sectors enhances the usefulness of the accounts for purposes of economic analysis by grouping together institutional units with similar objectives and types of behaviour. Sectors and subsectors are also needed in order to be able to target or monitor particular groups of institutional units for policy purposes. For example, the household sector has to be divided into subsectors in order to be able to show how different sections of the community are affected by, or benefit from, the process of economic development or government economic and social policy measures. Similarly, it may be important to treat corporations subject to control by non-residents as subsectors of the financial and non-financial corporate sectors not only because they are liable to behave differently from domestically controlled corporations but because policymakers may wish to be able to identify and observe those parts of the economy that are subject to influence from abroad. It would also enhance the possibilities of analysing the impact of foreign-controlled corporations on the generation and distribution of income, and capital formation. The division of sectors into subsectors depends upon the type of analysis to be undertaken, the needs of policymakers, the availability of data and the economic circumstances and institutional arrangements within a country.

Breakdowns of non-financial and financial corporations based on control

- 5.38 One common subsectoring, as shown in the bottom half of figure 5.1 (i.e., below the horizontal dotted line), is to identify those non-financial corporations and financial corporations that are controlled domestically and those that are foreign controlled (for the definition of control, see paragraphs 5.112 – 126 below). Domestically controlled corporations are further split into public corporations (those controlled by government) and others, which are known as national private corporations. In addition, “of which” items are included for domestically controlled public and private corporations that are part of a domestic multinational enterprise (MNE), i.e., those corporations whose ultimate controlling parent is resident in the same economy. An MNE is a legal entity that has at least one non-resident affiliate or branch, and exercises control over its affiliate(s) or branch(es) either directly—by owning over 50 percent of the voting power in the entity—or by indirect transmission of control. The MNE is the ultimate controlling parent—the direct investor at the top of the control chain. The MNE group consists of the MNE and the set of entities—regardless of their economies of residence—that are under the control of the same ultimate controlling parent (see section C, chapter 23, 2025 SNA/chapter 15, *BPM7* for additional details on MNEs). For countries where the presence of special purpose entities (SPEs; see paragraphs 5.86 – 5.87 below) is significant, a separate identification of SPEs, as an “of which” item, is recommended as supplementary information.

Breakdowns of households

- 5.39 Distributional information on household income, consumption, saving and wealth is considered highly relevant to the analysis of well-being. Therefore, additional breakdowns of the households’ sector are recommended as a standard. As a minimum, compilers should aim to provide breakdowns according to income and wealth deciles, and, if possible, also for the top 5 per cent and the top 1 per cent. Alternative breakdowns, for example by main source of income, household type, housing status and by age of the reference person are also recommended, as supplementary items. Further details are provided in paragraphs 5.221 – 231 as well as chapter 32.

Non-profit institutions

- 5.40 As described above, the SNA assigns NPIs to different sectors according to whether they produce for the market or not, regardless of motivation, status of employees or the activity they are engaged in. However, there is increasing interest in considering the full set of NPIs as evidence of “civil society” so it is recommended that NPIs within the corporate and government sectors be identified in distinct subsectors so that supplementary tables summarizing all NPI activities can be derived in a straightforward manner as and when required.

Other subsectoring

- 5.41 The question of subsectoring is included in the more extensive consideration of each institutional sector in following sections. Particular subsectors are suggested for general government, non-financial corporations, financial corporations and households. An overview of the standard breakdowns in the system of national accounts is given in table 5.1 (2025 SNA)/Table 4.1 (*BPM7*).

Table 5.1 (2025 SNA)/Table 4.1 (BPM7): Standard classification of institutional sectors in the system of national accounts (= updated version of Table 4.1 of *BPM6*)

S1 Total economy

S11 Non-financial corporations

Classification based on control

S1101 Public non-financial corporations

Of which: Part of domestic multinational enterprise (MNEs)

S1102 National private non-financial corporations

Of which: Part of domestic multinational enterprise (MNEs)

S1103 Foreign-controlled non-financial corporations¹

Of which: Special purpose entities (SPEs)

S12 Financial corporations

Classification based on control

S1201 Public financial corporations

Of which: Part of domestic multinational enterprise (MNEs)

S1202 National private financial corporations

Of which: Part of domestic multinational enterprise (MNEs)

S1203 Foreign-controlled financial corporations¹

Of which: Special purpose entities (SPEs)

Classification based on type of financial services

S121 Central bank²

S122 Deposit-taking corporations, except the central bank

S123 Money market funds (MMFs)

S124 Non-MMF investment funds

S125 Other financial intermediaries, except insurance corporations and pension funds

S126 Financial auxiliaries

S127 Captive financial institutions and money lenders

S128 Insurance corporations

S129 Pension funds

S13 General government

General government classification—alternative A

S1311 Central government

S1312 State government

S1313 Local government

S1314 Social security funds

General government classification—alternative B

S1321 Central government³

S1322 State government³

S1323 Local government³

S14 Households⁴

S15 Nonprofit institutions serving households

S2 Rest of the world

May be classified in the same way as resident institutional sectors, with the addition of:

- International organizations
 - International financial organizations
 - Central bank of currency union⁵
 - Other
- International nonfinancial organizations

1 While all foreign controlled corporations are foreign direct investment enterprises, the reverse is not true (see paragraph 5.126).

2 Additional subsector may be identified for monetary authorities, where needed (see paragraph 5.154).

3 Including social security funds of this level of government.

4 Subsectors of the household sector will be based on income and wealth deciles.

5 If the reporting economy is a member state of a currency union.

5.42 The institutional sector classification in the external accounts is shown in table 4.2. It follows the same sectors and subsectors as the SNA institutional sector classification shown in table 4.1, but with order and groupings to allow greater backward compatibility with the BPM6 classification and a shorter list of sectors for economies in which it is not practical to implement the full classification. The full institutional sector detail is required for external accounts to be fully integrated with monetary, flow of funds, and other financial data. Domestic and foreign controlled corporations may be identified separately on a supplementary basis.

Table 4.2 (*BPM7*): Classification of institutional sectors in external accounts (= updated version of Table 4.2 of *BPM6*)

Central bank

*Monetary authorities*¹

Deposit-taking corporations except the central bank²

*Of which SPEs*¹

General government

Other financial corporations (OFCs)²

Money market funds (MMFs)^{1 2}

Non-MMF investment funds^{1 2}

Insurance corporations^{1 2}

Pension funds^{1 2}

Other financial intermediaries except insurance corporations and pension funds^{1 2}

Of which Central clearing counterparties^{1 2}

Captive financial institutions and money lenders, and financial auxiliaries^{1 2}

*Of which SPEs*¹

Nonfinancial corporations (NFCs)²

*Of which SPEs*¹

Households and nonprofit institutions serving households

Additional sectors for counterpart data:

International organizations

International financial organizations

Central bank of currency union

Other international organizations

1 These items are supplementary (i.e., countries are encouraged to compile these breakdowns when they are relevant to their countries).

2 Supplementary “of which” items may be provided for public corporations.

Note: Captive financial institutions and money lenders as well as financial auxiliaries are combined to reduce the compilation burden (they are not regarded being involved in financial intermediation). However, they can be separately identified in the countries where they have large cross-border transactions and positions. Households and non-profit institutions serving households can also be compiled separately in the countries where compilers see its merit. Data for central clearing counterparties (CCPs) could be compiled as an “of which” item for countries that have large cross-border transactions and positions related to CCPs. Data for SPEs are “of which” items for deposit-taking corporations, OFCs and NFCs, but they could also be compiled for other institutional sectors if they play an important role in the country.

5.43 Transactions in financial instruments between residents and non-residents raise particular issues concerning attribution of institutional sector. The economic owner of the asset, the creditor, is invariably one party to any change of economic ownership of the asset. Therefore, for assets, sector attribution by creditor and by transactor coincide. A claim on a resident debtor, however, may change ownership between a resident creditor and a non-resident creditor so that the domestic sector of the debtor may not coincide with that of the transactor. For instance, the issuer may be a resident in one institutional sector, the seller a resident in another institutional sector, and the buyer a non-resident.

5.44 Although the sector classification for liabilities is clearly according to the issuer, for the sector data in the financial account, there are both practical and analytical considerations over whether the sector allocation should be determined according to the issuer or the seller. By convention, the sector of the debtor is the one that determines the classification of the change of ownership that has occurred, because the original nature of the liability is generally considered more significant than the identity of the resident seller of the claim. The same issues apply for financial instruments issued by a resident that are sold by a non-resident holder to a resident buyer.

8. THE REST OF THE WORLD

5.45 On occasion it is convenient to refer to non-resident households or corporations as units that are resident in the rest of the world. Whenever accounts are drawn up for institutional sectors, as well as an account for the total economy, a further account is presented showing the relationship with the rest of the world. In effect, therefore transactions and positions with the rest of the world are recorded as if the rest of the world is a de facto sixth sector.

5.46 For the purpose of reporting external sector statistics data, more disaggregated institutional sector breakdowns for the transactions and positions with non-residents are followed (see table 4.2)

B. CORPORATIONS IN MACROECONOMIC STATISTICS

1. TYPES OF CORPORATIONS

- 5.47 In macroeconomic statistics, the term corporation is used more broadly than in just the legal sense. In general, all entities that are:
- a. capable of generating a profit or other financial gain for their owners,
 - b. recognized at law as separate legal entities from their owners who enjoy limited liability,
 - c. set up for purposes of engaging in market production through the selling of all or most of their goods and/or services at economically significant prices,

are treated as corporations, however they may describe themselves or whatever they may be called. As well as legally constituted corporations the term corporations is used to include cooperatives, limited liability partnerships, notional resident units and quasi-corporations. Whenever the term corporation is used, the broader coverage rather than the narrow legal definition is intended unless otherwise stated. Each of the main components of the broader coverage is discussed in turn below.

Legally constituted corporations

- 5.48 Legally constituted corporations may be described by different names: corporations, incorporated enterprises, public limited companies, public corporations, private companies, joint-stock companies, limited liability companies, limited liability partnerships, and so on. ***A legally constituted corporation is a legal entity, created for the purpose of producing goods or services for the market, that may be a source of profit or other financial gain to its owner(s); it is collectively owned by shareholders who have the authority to appoint directors responsible for its general management.***
- 5.49 The laws governing the creation, management and operations of legally constituted corporations may vary from country to country. Therefore, it is not feasible to provide a precise, legal definition of a corporation that would be universally valid. It is possible, however, to indicate in more detail the typical features of corporations that are most relevant from the point of view of macroeconomic statistics. They may be summarized as follows:
- a. A corporation is an entity created by process of law whose existence is recognized independently of the other institutional units that may own shares in its equity. The existence, name and address of a corporation are usually recorded in a special register kept for this purpose. A corporation may normally be expected to have a centre of predominant economic interest (that is, to be resident) in the country in which it is created and registered.
 - b. A corporation that is created for the purpose of producing goods or services for sale on the market does so at prices that are economically significant. This implies that it is a market producer. (A description of economically significant prices and the difference between market and non-market production is given in chapters 7 and 30.)



- c. A corporation is fully responsible and accountable at law for its own actions, obligations and contracts, this being an essential attribute of an institutional unit in macroeconomic statistics. A corporation is subject to the tax regime of the country where it is resident in respect of its productive activities, income or assets.
- d. Ownership of a corporation is vested in the shareholders collectively. The amount of income actually distributed to shareholders as dividends in any single accounting period is decided by the directors of the corporation. Income is usually distributed to shareholders in proportion to the value, or amounts, of the shares or other capital participations they own. There may be different kinds of shares in the same corporation carrying different entitlements.
- e. In the event of a corporation being wound up, or liquidated, the shareholders are similarly entitled to a share in the net worth of the corporation remaining after all assets have been sold and all liabilities in debt instruments paid. If a corporation is declared bankrupt because its debt-related liabilities exceed the value of its assets, the shareholders are usually not liable to repay the excess liabilities. However, in cases of implicit guarantees or significant reputational risks, the owner may experience to have a negative equity (see paragraphs 14.xx – 14.xx (SNA 2025) / paragraphs xx.xx – xx.xx (BPM7)).
- f. Control of a corporation is ultimately exercised by the shareholders collectively. A corporation has a board of directors that is responsible for the corporation's policy and appoints the senior management of the corporation. The board of directors is usually appointed by the collective vote of the shareholders.
- g. In practice, however, some shareholders may exert much more influence or control over the policies and operations of a corporation than others.
- h. The voting rights of shareholders may not be equal. Some types of shares may carry no voting rights, while others may carry exceptional rights, such as the right to make specific appointments to the board of directors or the right to veto other appointments made on a majority vote. Such exceptional rights may be held by the government when it is a shareholder in a corporation.
- i. Many shareholders with voting rights do not choose to exercise them, so that a small, organized minority of active shareholders may be in a position to control the policy and operations of a corporation.

Cooperatives, limited liability partnerships, etc.

- 5.50 Cooperatives are set up by producers for purposes of marketing their collective output. The profits of such cooperatives are distributed in accordance with their agreed rules and not necessarily in proportion to shares held, but effectively they operate like corporations. Similarly, partnerships whose members enjoy limited liability are separate legal entities that behave like corporations. In effect, the partners are at the same time both shareholders and managers.

Quasi-corporations

- 5.51 Some unincorporated enterprises function in all (or almost all) respects as if they were incorporated. These are termed quasi-corporations in macroeconomic statistics and are included with corporations in the non-financial and financial corporations sectors. A quasi-corporation is:
- a. either an unincorporated enterprise owned by a resident institutional unit that has sufficient information to compile a complete set of accounts and is operated as if it were a separate corporation and whose de facto relationship to its owner is that of a corporation to its shareholders, or
 - b. an unincorporated enterprise owned by a non-resident institutional unit that is deemed to be a resident institutional unit because it engages in a significant amount of production in the economic territory over a long or indefinite period of time.
- 5.52 Three main kinds of quasi-corporations are recognized in macroeconomic statistics:
- a. Unincorporated enterprises owned by government units that are engaged in market production and that are operated in a similar way to publicly owned corporations;
 - b. Unincorporated enterprises, including unincorporated partnerships or trusts, owned by households that are operated as if they were privately owned corporations;
 - c. Unincorporated enterprises that belong to institutional units resident abroad, referred to as “branches”.
- 5.53 The intent behind the concept of a quasi-corporation is clear: namely, to separate from their owners those unincorporated enterprises that are sufficiently self-contained and independent that they behave in the same way as corporations. If they function like corporations, they must keep complete sets of accounts. Indeed, the existence of a complete set of accounts, including balance sheets, for the enterprise is a necessary condition for it to be treated as a quasi-corporation. Otherwise, it would not be feasible from an accounting point of view to distinguish the quasi-corporation from its owner.
- 5.54 As a quasi-corporation is treated as a separate institutional unit from its owner, it must have its own value added, saving, assets, liabilities, etc. It must be possible to identify and record any flows of income and capital that are deemed to take place between the quasi-corporation and its owner. The amount of income withdrawn from a quasi-corporation during a given accounting period is decided by the owner, such a withdrawal being equivalent to the payment of a dividend by a corporation to its shareholder(s). Given the amount of the income withdrawn, the saving of the quasi-corporation (that is, the amount of earnings retained within the quasi-corporation) is determined. A balance sheet is also needed for the quasi-corporation showing the values of its non-financial assets used in production and also the financial assets and liabilities owned or incurred in the name of the enterprise.
- 5.55 Experience has shown that countries have difficulty treating unincorporated enterprises owned by households as quasi-corporations. However, it is not useful to introduce additional criteria,

such as size, into the definition of quasi-corporations owned by households. If an enterprise is not in fact operated like a corporation and does not have a complete set of accounts of its own, it cannot and should not be treated as a quasi-corporation however large it may be.

- 5.56 A quasi-corporation is also identified when preliminary expenses, including for mining rights, license fees, site preparation, building permits, purchase taxes, local office expenses, and lawyers' fees, are incurred by a non-resident unit, prior to establishing a legal entity. As a result of identifying a quasi-corporation in those cases, the preparatory expenses are recorded in the economy of the future operations as being resident-to-resident transactions that are funded by a (foreign) direct investment inflow. Because of the limited scale of these activities, assembly of acceptable data for these enterprises is often feasible, despite the lack of incorporation. If the project does not subsequently go into operation, the value of the direct investment is eliminated by an entry for other changes in the volume of assets or liabilities.

Institutional units with cross-border elements

Branches

- 5.57 When a non-resident unit has substantial operations over a significant period in an economic territory, but no separate legal entity, a branch may be identified as an institutional unit. This unit is identified for statistical purposes because the operations have a strong connection to the location of operations in all ways other than incorporation.
- 5.58 An unincorporated enterprise abroad should be treated as a quasi-corporation when indications of substantial operations can be identified separately from the rest of the entity. As with other quasi-corporations, either a complete set of accounts, including a balance sheet of assets and liabilities, for the unit exists or it would be meaningful from an economic point of view to compile them. The availability of separate records indicates that an actual unit exists and makes it practical to prepare statistics. In addition, all or most of the following factors tend to be present for a branch to be recognized:
- a. Production based in the territory is undertaken or intended for one year or more in a territory other than that of its head office:
 -
 - If the production process involves physical presence, then the operations should be physically located in that territory. Some indicators of an intention to locate in the territory include purchasing or renting business premises, acquiring capital equipment, and recruiting local staff.
 -
 - If the production does not involve physical presence, such as activities related to the ownership of patents, "virtual manufacturing", some cases of banking, insurance, or other financial services, the operations should be recognized as being in the territory by virtue of the registration or legal domicile of those operations in that territory.
 - b. The operations are recognized as being subject to the income tax system, if any, of the economy in which it is located even if it may have a tax-exempt status.

- 5.59 The identification of branches has implications for the statistical reporting of both the parent and branch. The operations of the branch should be excluded from the institutional unit of its head office in its home territory and the delineation of parent and branch should be made consistently in both of the affected economies. Each branch, as described in the above paragraphs, is a (foreign) direct investment enterprise. Branches most commonly arise for financial and non-financial corporations, but it is also possible that households, non-profit institutions serving households (NPISHs), or governments (when government operations do not have diplomatic immunity) have branches.

Construction projects

- 5.60 Some construction projects undertaken by a non-resident contractor may give rise to a branch, known as direct investment enterprise in external accounts. Construction may be carried out or managed by a non-resident enterprise, without the creation of a local legal entity:
- a. For major projects (such as bridges, dams, power stations) that take a year or more to complete and that are managed through a local site office, the operations would usually satisfy the criteria for identification of a branch in paragraphs 5.57 – 5.58, and so would not be classified as international trade in services;
 - b. In other cases, the construction operations may not satisfy the conditions for recognition as a branch, for example, for a short-term project or one undertaken from the home territory rather than from a local office. In those cases, the work provided to customers resident in the territory of those operations is classified as international trade in construction and included in services (i.e., an export of services by the home base and an import of services by the territory of operations).

Production delivered from a base

- 5.61 Activities such as consulting, maintenance, training, technical assistance, and health care may be provided by a branch or from a home base. If operations are substantial enough to satisfy the criteria given in paragraphs 5.57 – 5.58, a branch would be recognized as a (foreign) direct investment enterprise. On the other hand, if a branch is not recognized in the territory, the operations will give rise to international trade in services. The residence of units providing services in this way is discussed in paragraph 5.273.
- 5.62 Mobile equipment, such as ships, aircraft, drilling platforms, and railway rolling stock, may operate across more than one economic territory. The criteria for recognition of a branch also apply in these cases. That is, if the operations in a territory outside the home base are substantial enough, they meet the definition of a branch. For example, a secondary base for servicing the fleet with long-term presence and its own accounts may satisfy the definition of a branch. If they do not satisfy the definition of a branch, the activities of the ship-operating enterprise are included in the economy where the operator is resident.

- 5.63 Similarly to mobile equipment, a multiterritory pipeline that passes through a territory, but is not operated by a separate legal entity in that territory, would be recognized as constituting a branch if there is a substantial presence, availability of separate accounts, and so on. In cases in which such operations are not separate institutional units (a) there may be payment of rent to a notional unit owning the land or a long-term lease of land, of the kind discussed in paragraphs 5.65 – 5.66; or (b) there may be a multiterritory enterprise of the type discussed in paragraphs 5.72 – 5.75.
- 5.64 When a branch is identified, there are (foreign) direct investment inflows to the territory, but the provision of goods or services to customers in that territory is a resident-to-resident transaction. In contrast, if the operations are not substantial enough to qualify as a branch, the provision of goods or services to customers in that territory are imports of that territory.

Notional resident units for land and other natural resources, and buildings and structures owned by non-residents

- 5.65 Immovable assets such as land and other natural resources, and buildings and structures are treated as being owned by resident units except in one particular circumstance. If the legal owner is actually non-resident, an artificial unit, called a notional resident unit, is created for statistical purposes. The notional resident unit is recorded as owning the asset and receiving the rent or rentals that accrue to the asset. The legal owner owns the equity in the notional resident unit and then receives income from the notional resident unit in the form of property income paid abroad. This treatment is designed so that the relevant non-financial assets are always assets of the economy in whose territory they are located. Otherwise, the land would appear in another economy's national balance sheet. The only exception is made for land and buildings in extraterritorial enclaves of foreign governments (such as embassies, consulates and military bases) that are subject to the laws of the home territory and not those of the territory where they are physically situated.
- 5.66 A non-resident with a resource lease is classified as incurring rent and no notional unit is automatically created. However, it is usually the case that ownership of land and other natural resources such as subsoil assets, non-cultivated biological resources, water, and rights to use these assets through a lease or other permit over long periods are associated with a branch. In addition, preliminary expenses for an entity to be incorporated in the future are to be regarded as a notional (foreign) direct investment enterprise.
- 5.67 The operations of notional resident units include holding the asset, paying any associated expenses (such as insurance, repairs, and taxes), collecting rent or rental on the asset, and any other transactions associated with those functions. If the non-resident owner uses the property, the notional resident unit generates rent (in the case of unimproved land, mineral rights, and so on, see paragraph 11.85) or rental included in travel or operating leasing services (for land with buildings or other improvements, see paragraphs 10.99, 10.100, and 10.157) in kind to its owner. The corresponding entry to the rent or rental would be income payable in kind to the owner by the notional resident unit. The notional resident unit should also be treated as incurring expenses and taxes; payments by the non-resident owner to meet a loss arising from these costs therefore would be recorded as direct investment flows from the owner to the notional resident unit. Other transactions of the owner would not be attributed to the notional resident unit, for example, any borrowing or debt service. As a result of the limited nature of notional resident units, making acceptable estimates for their operations is generally feasible when they are significant.

- 5.68 When the ownership of land and other natural resources is associated with substantial operations, so that the requirements in paragraphs 5.57 – 5.58 are met, a branch is identified. In such cases, a notional resident unit is not identified because the branch already exists as a resident owner.
- 5.69 The notional resident unit that owns land or other natural resources may be contrasted with a branch, which has a full set of accounts. An example is a non-resident fishing operator having a 10-year fishing license for the waters of a territory. If the operator has a base in the territory, keeps separate records, and so on, then a branch is identified, and its accounts will show sales of fish and other transactions. Another example could be a commercial farm owned by a non-resident entity. In contrast, the only activity of a notional unit will be the supply of rent or rental services arising from the ownership of property.
- 5.70 When several partners own land, there may be a quasi-corporation, by virtue of the management of the land being separate from that of its individual owners. In that case, for statistical purposes, the non-resident partners would own a share in the quasi-corporation, so there would be no need to identify an additional notional resident unit. The notional resident unit for ownership of land is almost always a (foreign) direct investment enterprise (the exception being for land where an individual non-resident's voting power is below 10 percent which is included under other investment/other equity in balance of payments—see paragraph 6.xx, *BPM7*).
- 5.71 Some kinds of time-share accommodation arrangements may also give rise to a notional resident unit. For example, the acquisition of deeded ownership, or a similar arrangement, is equivalent to the establishment of a notional resident unit. (See paragraph 11.xx and Table 11.3 for a discussion of alternative time-share arrangements).

Multiterritory enterprises

- 5.72 Some enterprises may operate as a seamless operation over more than one economic territory. Although the enterprise has substantial activity in more than one economic territory, it is run as an indivisible operation with no separate accounts or decisions, so that no separate branches can be identified. Such enterprises may have operations including shipping lines, airlines, hydroelectric schemes on border rivers, pipelines, bridges, tunnels, and undersea cables. Some NPISHs also may operate in this way.
- 5.73 Governments usually require separate entities or branches to be identified in each economic territory for more convenient regulation and taxation. Multiterritory enterprises may be exempted from such requirements, but there may be arrangements, such as a formula for payment of taxation to the respective authorities.
- 5.74 In the case of a multiterritory enterprise, it is preferable that separate institutional units be identified for each economy. If that is not feasible because the operation is so seamless that separate accounts cannot be developed, it is necessary to prorate the total operations of the enterprise into the individual economic territories. The factor used for prorating should be based on available information that reflects the contributions to actual operations. For example, equity shares, equal splits, or splits based on operational factors such as tonnages or wages could

be considered. Where taxation authorities have accepted the multiterritory arrangements, a prorating formula may have been determined, which should be the starting point for statistical purposes. Although the situation is somewhat different from the case of joint administration or sovereignty zones, the solution of prorating may be the same.

- 5.75 The prorating of the enterprise means that all transactions need to be split into each component economic territory. The treatment may be quite complex to implement. This treatment has implications for other statistics and its implementation should always be coordinated for consistency. Compilers in each of the territories involved are encouraged to cooperate to develop consistent data, avoid gaps, and minimize respondent and compilation burden, as well as assist counterparties to report bilateral data on a consistent basis.

2. SPECIAL CASES

Groups of corporations

- 5.76 Large groups of corporations, or conglomerates, may be created whereby a parent corporation controls several subsidiaries, some of which may control subsidiaries of their own, and so on. For certain purposes, it may be desirable to have information relating to a group of corporations as a whole. However, each individual corporation should be treated as a separate institutional unit, whether or not it forms part of a group. Even subsidiaries that are wholly owned by other corporations are separate legal entities that are required by law and the tax authorities to produce complete sets of accounts, including balance sheets. Although the management of a subsidiary corporation may be subject to the control of another corporation, it remains responsible and accountable for the conduct of its own production activities.

- 5.77 Another reason for not treating groups of corporations as single institutional units is that groups are not always well defined, stable or easily identified in practice. It may be difficult to obtain data for groups whose activities are not closely integrated. Moreover, many conglomerates are much too large and heterogeneous for them to be treated as single units, and their size and composition may be continually shifting over time as a result of mergers and takeovers.

Joint Ventures

- 5.78 A joint venture involves the establishment of a corporation, partnership or other institutional unit in which each party legally has joint control over the activities of the unit. The units operate in the same way as other units except that a legal arrangement between the parties establishes joint control over the unit. As an institutional unit, the joint venture may enter into contracts in its own name and raise finance for its own purposes. A joint venture maintains its own accounting records. Joint ventures are typically established for the purpose of executing a business undertaking in which the parties agree to share in the profits and losses of the enterprise as well as the capital formation and contribution of operating inputs or costs. Generally, there is no intention of a continuing relationship beyond the original purpose.

- 5.79 Whether a quasi-corporation is identified for the joint venture without a separate legal status depends on the arrangements of the parties and legal requirements. The joint venture is a quasi-corporation if it meets the requirements for an institutional unit, particularly by having its own records. Otherwise, if each of the operations are effectively undertaken by the partners individually, then the joint venture is not an institutional unit and the operations would be seen as being undertaken by the joint venture partners separately. If foreign investment is involved

in such cases, there would usually be direct investment enterprises that undertake the joint venture operations of each of the partners.

- 5.80 Because of the ambiguous status of joint ventures, there is a risk that they could be omitted or double-counted, so particular attention needs to be paid to them.

Head offices and holding companies

- 5.81 Two quite different types of units exist that are both often referred to as holding companies. The first is the head office that exercises some aspects of managerial control over its subsidiaries. These may sometimes have noticeably fewer employees, and more at a senior level, than its subsidiaries but it is actively engaged in production. These types of activities are described in ISIC Rev. 4 in section M class 7010 as follows:

This class includes the overseeing and managing of other units of the company or enterprise; undertaking the strategic or organizational planning and decision making role of the company or enterprise; exercising operational control and manage the day-to-day operations of their related units.

Such units are allocated to the non-financial corporations sector unless all or most of their subsidiaries are financial corporations, in which case they are treated by convention as financial auxiliaries in the financial corporations sector.

- 5.82 The type of unit properly called a holding company is a unit that holds the assets of subsidiary corporations but does not undertake any management activities. They are described in ISIC Rev. 4 in section K class 6420 as follows:

This class includes the activities of holding companies, i.e. units that hold the assets (owning controlling-levels of equity) of a group of subsidiary corporations and whose principal activity is owning the group. The holding companies in this class do not provide any other service to the enterprises in which the equity is held, i.e. they do not administer or manage other units.

Such units are always allocated to the financial corporations sector and treated as captive financial institutions even if all the subsidiary corporations are non-financial corporations.

- 5.83 To distinguish head offices and holding companies from other institutional units, information on the structure of the balance sheets could be used practically to identify head offices and holding companies as entities having at least 50 per cent of their assets consisting of equity vis-à-vis their subsidiaries.

- 5.84 A strict definition of holding companies (in the sense that holding companies do not provide any management services) should be used when classifying institutional units as holding companies. For units where information on variables like management control is not available,

or only available at great cost in practice, it is recommended to base the distinction between head offices and holding companies on an employment criterion, as follows:

- Head offices are actively engaged in production, although they may have noticeably fewer employees, and more at a senior level, than its subsidiaries. However, having zero employment is a clear indication that a unit is not a head office.
- On the other hand, holding companies simply holding assets may do this with very few or without any employed personnel.
- Employment thresholds for the delineation between head offices and holding companies should be determined taking into account national circumstances. In particular, national legislative requirements for the number of employees of holding companies should be taken into account. As a general indication, employment of three or more persons, or employment exceeding the national legal minimum employment, is a first indicator for a unit being a head office.

5.85 To determine the institutional independence of head offices and holding companies, the following principles apply:

- The standard criteria for an institutional unit should always be applied – thus also for head offices and holding companies.
- Head offices are always to be considered as separate institutional units.
- Holding companies owned by non-residents are always to be considered institutional units.
- Holding companies that have multiple parents or shareholders is a sufficient qualification for a unit being an institutional unit.
- For holding companies wholly owned by a single resident unit, “no employees and no remuneration of employees” is not a sufficient criterion to conclude that there is a lack of institutional independence; however, it can be used as an indicator to consider units for further investigation to consider their lack of independence.

Other special cases

Special purpose entities

5.86 A number of institutional units may be described as special purpose entities (SPEs). In macroeconomic statistics, the term SPEs is used exclusively for institutional units which align to the following definition:

- a. An SPE, resident in an economy, is a formally registered and/or incorporated legal entity recognized as an institutional unit, with no or little employment up to maximum of five employees, no or little physical presence, and no or little physical production in the host economy.
- b. SPEs are directly or indirectly controlled by non-residents.
- c. SPEs are established to obtain specific advantages provided by the host jurisdiction with an objective to (i) grant its owner(s) access to capital markets or sophisticated financial services; and/or (ii) isolate owner(s) from financial risks; and/or (iii) reduce regulatory and tax burden; and/or (iv) safeguard confidentiality of their transactions and owner(s).
- d. SPEs transact almost entirely with non-residents and a large part of their financial balance sheet typically consists of cross-border claims and liabilities.
- 5.87 Some institutional units incorporated in the same economic territory as their parents may satisfy all the above criteria, with the exception that they are not directly or indirectly controlled by non-resident parents. Such “special purpose units” or “special purpose vehicles” are sometimes referred to as special purpose entities as well. These units are typically consolidated with their resident parents, because they lack autonomy of decision. In the case that they operate autonomously and can be considered as separate institutional units (e.g., some securitization vehicles), they should not be consolidated with their resident parents. However, these latter units are not considered as part of SPEs. The term special purpose units/vehicles is used to denote all such units, those owned by non-resident parents as well as those owned by resident parents.
- 5.88 For countries where the presence of SPEs is significant, a separate identification of SPEs, as an of which item, is recommended as supplementary information.
- 5.89 In external sector statistics, the identification of SPEs as supplementary (“of which”) items for deposit-taking corporations, other financial corporations, and nonfinancial corporations sectors is strongly recommended in countries where the economic activity of such units is significant.
- 5.90 Whether a unit has all or none of the characteristics described in paragraph 5.86 (a-d), and whether it is described as an SPE or some similar designation or not, it is treated in macroeconomic statistics in the same way as any other institutional unit by being allocated to sector and industry according to its principal activity unless it falls into one of the three following categories:
- Captive financial institutions,
 - Artificial subsidiaries of corporations,
 - Special purpose units of general government.

Each of these is described below. A list of the most common types of SPEs, including their (sub)sector classification, is presented in **table x.x in chapter 23 SNA/chapter 15 BPM**.

Captive financial institutions

- 5.91 A holding company that simply owns the assets of subsidiaries is one example of a captive financial institution. Other units that are also treated as captive financial institutions are units with the characteristics of SPEs as described above (not necessarily controlled by a non-resident parent), including some units used for holding and managing wealth for individuals or families, holding assets for securitization, raising or borrowing funds on behalf of related companies (such a company may be called a conduit), intra group lending companies, captive factoring and invoicing companies, captive financial leasing companies, etc..
- 5.92 The degree of independence from its parent may be demonstrated by exercising some substantive control over its assets and liabilities to the extent of carrying the risks and reaping the rewards associated with the assets and liabilities. Such units are classified in the financial corporations sector.
- 5.93 An entity of this type that cannot act independently of its parent and is simply a passive holder of assets and liabilities (sometimes described as being on auto-pilot) is not treated as a separate institutional unit unless it is resident in an economy different from that of its parent. If it is resident in the same economy as its parent, it is treated as an “artificial subsidiary” as described immediately below.
- 5.94 More guidance on the treatment of trusts and similar types of funds which hold and manage financial and non-financial assets on behalf of individuals or families is provided in **paragraphs 5.103 – 5.111**.

Artificial subsidiaries of corporations

- 5.95 Within macroeconomic statistics, the term corporation is used to denote both those institutions legally recognized as corporations and other units treated in macroeconomic statistics as corporations, specifically quasi-corporations, branches and notional units. For the following four paragraphs, however, the term corporation is used in the sense of a corporation as a legal entity.
- 5.96 A subsidiary corporation, wholly owned by a parent corporation, may be created to provide services to the parent corporation, or other corporations in the same group, in order to avoid taxes, to minimize liabilities in the event of bankruptcy, or to secure other technical advantages under the tax or corporation legislation in force in a particular country. For example, the parent may create a subsidiary to which ownership of its land, buildings or equipment is transferred and whose sole function is to lease them back again to the parent corporation; the subsidiary may be the nominal employer of all the staff who are then contracted to other corporations in the group, the subsidiary may keep the accounts and records of the parent on a separate computer installation; the role of the subsidiary may be established to take advantage of favourable funding or regulatory treatments and so on. In some cases, corporations may create

“dormant” subsidiaries that are not actually engaged in any production but which may be activated at the convenience of the parent corporation.


- 5.97 In general, these sorts of corporations do not satisfy the definition of an institutional unit because they lack the ability to act independently from their parent corporation and may be subject to restrictions on their ability to hold or transact assets held on their balance sheets. Their level of output and the price they receive for it are determined by the parent that (possibly with other corporations in the same group) is their sole client. They are thus not treated as separate institutional units but are treated as an integral part of the parent and their accounts are consolidated with those of the parent. As noted above, the accounts for those entities on auto-pilot are also consolidated with their parent corporation unless they are resident in an economy different from that where the parent is resident.
- 5.98 Quasi-corporations such as a partnership or trust may also be set up by a parent corporation for similar reasons to the subsidiary corporations just described. Within the SNA, these are also treated as an integral part of the parent and their accounts are consolidated with the parent, unless they are resident in another country.
- 5.99 A distinction must be made between artificial subsidiaries as just described and a unit undertaking only ancillary activities. As described in more detail in section D of chapter 6, ancillary activities are limited in scope to the type of service functions that virtually all enterprises need to some extent or another such as cleaning premises, running the staff payroll or providing the information technology infrastructure for the enterprise. Units undertaking only ancillary activities will in general not satisfy the conditions of being an institutional unit (for the same sort of reason as artificial subsidiaries do not) but they may sometimes be treated as a separate establishment of the enterprise if this is analytically useful.

Special purpose units of general government

- 5.100 Governments may set up special purpose units, such as special purpose vehicles (SPVs) for financial convenience (special purpose units/vehicles are discussed in paragraph 5.87). For example, the special purpose unit may be involved in fiscal or quasi-fiscal activities (including securitization of assets, borrowing, etc.). Resident special purpose units that function only in a passive manner relative to general government and that carry out fiscal and quasi-fiscal activities do not satisfy the criteria to be institutional units and are therefore not treated as separate institutional units in macroeconomic statistics; they are treated as part of general government regardless of their legal status. Resident special purpose units acting independently, acquiring assets and incurring liabilities on their own behalf, accepting the associated risk, are treated as separate institutional units and are classified to a sector according to their principal activity.
- 5.101 Special purpose units that are resident in a different country (called SPEs following [paragraph 5.86](#)) than their controlling government are always classified as separate institutional units in the economy where they are established. When such entities exist, care must be taken to reflect the fiscal activities of government accurately. All flows and stock positions between the general government unit and the SPEs should be recorded in the accounts for general government and the rest of the world when they occur.

- 5.102 A government may create a SPE to undertake government borrowing, incur government outlays, or collect revenue abroad for fiscal policy purposes. Even if there are no actual economic flows recorded between the government and the SPE related to these fiscal activities, flows and stock positions should be imputed in the accounts of both the government and the rest of the world to reflect the fiscal activities of the government undertaken by the SPE. (More detailed guidance is provided in [chapter 30/BPM7 chapter 8](#).)

Trusts and similar types of funds

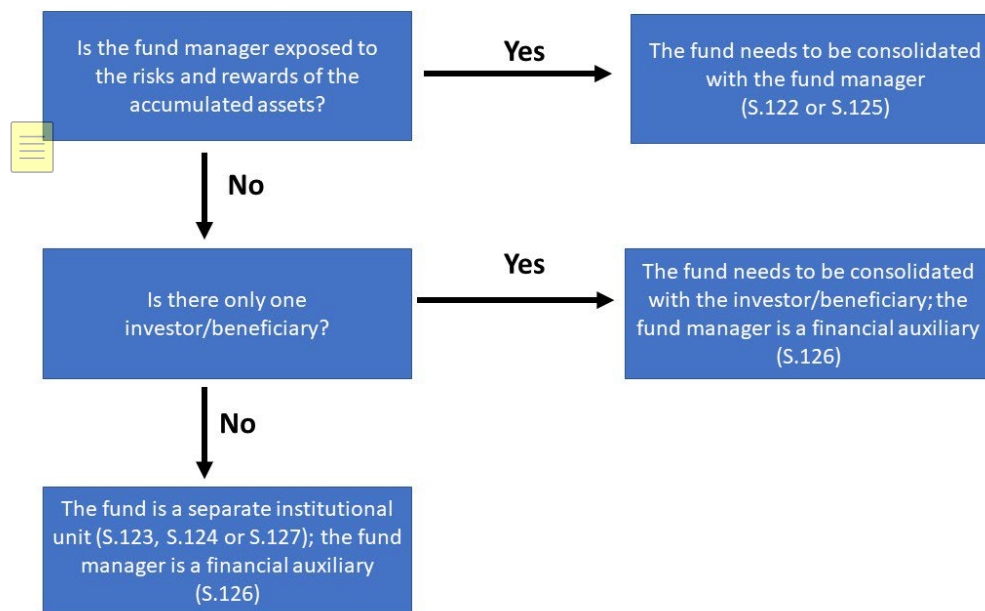
- 5.103 Trusts are arrangements whereby an economic agent (a trustee) holds property (but not economic ownership) as its nominal owner for the good of one or more beneficiaries. Their job is to [hold, manage and administer the funds in the trust](#) on behalf of the settlor (the creator of the trust). Their fiduciary duty as a trustee requires them to act in the best interest of the beneficiaries of the trust. The duties of a trustee are laid out upon the creation of the trust, and while they may differ depending on the situation, some tasks are common. The trustee oversees the distribution of the trust's funds to the beneficiaries. While the assets remain a part of the trust, the trustee is responsible for any investments that are made, ensuring any assets included in the trust, taking care of the administration, and overseeing the payment of taxes.
- 5.104 Several kinds of trustees, and accordingly trusts, can be distinguished:
- Charitable trustees manage funds left in a charitable trust and follow the instructions left by the creator of the trust;
 - Investment trustees manage the day-to-day operations of an investment account, helping it to grow over time;
 - Successor trustees are people who step in to manage a trust when the person who created the trust is unable to do so (through death or incapacitation);
 - Corporate trustees work with large firms that manage trusts for clients that pay them (other types of trustees are not always paid for their services like corporate trustees are); and
 -  Bankruptcy trustees step in when a person or business declares bankruptcy and their assets need to be administered.
- 5.105 Looking more specifically at these trusts set up by households, the trustee is not the economic owner of the assets. The trustee may be the legal owner of the assets, but the accumulated assets in the trust constitute a separate fund and are not part of the trustee's own assets, indicating that economic ownership is different from nominal/legal ownership. The main responsibilities of the trustee are to manage and administer the assets of the trust for the benefit of the beneficiaries. As such, they are typically not exposed to the risks and the rewards of the accumulated assets. On the other hand, the trust itself does not constitute a legal unit per se, although it is often considered as a separate unit.
- 5.106 The standard criteria for an institutional unit should be applied for treating a trust, or a similar type of fund, which is resident in the same economy as its beneficiaries. However, in cases

where the family trust, or a similar type of fund, is resident in another economy than its beneficiaries, it would always be treated as a separate institutional unit. However, in practice, it may not be that easy and straightforward to apply the standard criteria to trusts which are resident in the same economy as their beneficiaries. Especially in relation to the concept of autonomy of decision, one may need to look for more pragmatic criteria to approximate this concept. One of these criteria is the allocation of risks and rewards. In the case the risks and rewards are run, for example, by the trustee, or fund manager, one may assume that the trust does not have any autonomy of decision and that the fund manager is actually a financial intermediary. If the risks and rewards are instead allocated to the beneficiary/investor or beneficiaries/investors, one may also assume that the trust or fund does not have any autonomy of decision in the case of a single beneficiary who takes all the risks and rewards of the investment strategy. On the other hand, in the case of a trust or fund with multiple beneficiaries, the decision making process will be more complex. Decisions may be made by the trustee, as an auxiliary service to the ultimate beneficiaries/investors.

- 5.107 All in all, trusts and similar types of funds, should only be treated as separate institutional unit in the case that the trustee, or fund manager, is not exposed to the risks and the rewards, and instead the risks and rewards are assumed by multiple beneficiaries/investors. In the case of a single beneficiary/investor assuming the risks and rewards, the accumulated assets should be assigned to the sector of the beneficiary/investor. Trusts, or similar types of funds, with multiple beneficiaries/investors would generally be classified as S.127 Captive financial institutions and moneylenders, if the beneficiaries/investors are restricted to a particular group of entities, and not open to the public at large. If they would be open to other beneficiaries/investors as well, the trust, or fund, can be considered as part of S.123 Money market funds or S.124 Non-MMF investment funds. Non-resident trusts, or funds, with single beneficiaries/investors would always qualify as captive financial institutions (S.127). A decision tree for the treatment of trusts and similar types of funds is presented in [Figure 5.2 \(2025 SNA\)](#)



Figure 5.2 (2025 SNA): Illustrative allocation of trusts and similar types of funds (= Figure in paragraph 20 of the issue note on action point A.6 on the treatment of trusts and other funds as separate institutional units)



- 5.108 Government and public sector units may also create trusts. In such cases, government or public sector units may designate trustees which can be part, or not, of the public sector. When the risks and rewards remain with a government or public sector unit, then the trust should be classified within the public sector regardless of its legal form. Care should therefore be taken to analyse whether the government, directly or indirectly, is exposed to the risks and is the beneficiary of the rewards. In addition to the decision tree in Figure 5.2, if the fund manager is not exposed to the risks and rewards of the accumulated assets of the fund and the investors/beneficiaries are all public sector entities then it may be most appropriate to consider government as the ultimate investor/beneficiary and consolidate the fund within the government sector rather than treat it as a public financial corporation.
- 5.109 The term trust is also often used to designate other kinds of corporate arrangements that are established following similar legal provisions. For example, family trusts are established to own corporations or to undertake business activities such as farms. Such trusts may qualify as a quasi-corporation, to be classified as a holding company in sub-sector S.127 Captive financial institutions and money lenders, or as part of the non-financial corporations sector. Regarding the question whether or not they constitute separate institutional units, the same criteria as the ones for establishing a quasi-corporation in the case of large unincorporated family enterprises can be applied, i.e., the availability of sufficient information to compile a complete set of accounts, and the point that it is operated as if it were a separate corporation, whose de facto relationship to its owner is that of a corporation to its shareholders; see paragraph 5.51.
- 5.110 The term trust is also used in the context of unit trusts or investment trusts. In this context, it refers to a type of investment fund where a trust structure is being used. The treatment of these trusts is similar to other types of investment funds.

- 5.111 Finally, pension schemes may be set up as collective trusts. An example relates to funded employee pension schemes. The treatment of these trust-type arrangements is similar to those of other pension schemes. (More guidance on the treatment of pension schemes is provided in chapter 24.)

3. OWNERSHIP AND CONTROL OF CORPORATIONS

- 5.112 Control and ownership are different concepts. The ownership of a listed corporation is diffused among the institutional units that own its shares in proportion to the shareholdings. It is possible for one single institutional unit, whether another corporation, a household or a government unit, to own all the equity or shares in a corporation but, in general, ownership of a listed corporation is diffused among several, possibly very many, institutional units. By contrast, control is defined as the ability to determine the general corporate policy of the corporation. The expression “general corporate policy” as used here is understood in a broad sense to mean the key financial and operating policies relating to the corporation’s strategic objectives as a market producer.

- 5.113 A single institutional unit owning more than half of the shares, or equity, of a corporation is able to control its policy and operations by outvoting all other shareholders, if necessary. Similarly, a small, organized group of shareholders whose combined ownership of shares exceeds 50 per cent of the total is able to control the corporation by acting in concert. There may be exceptional cases in which certain shareholders enjoy privileged voting rights, such as a “golden share” giving a right of veto, but in general an individual institutional unit or group of units owning more than half the voting shares of a corporation can exercise complete control by appointing directors of its own choice. The degree of autonomy exercised by the directors and managers of a corporation is, therefore, likely to vary considerably, depending upon the extent to which the ownership of its shares is concentrated in the hands of a small number of other institutional units, whether these are other corporations, households or government units. In general, institutional units do not have to be autonomous but they do have to be responsible and accountable for the decisions and actions they take.

- 5.114 Because many shareholders do not exercise their voting rights, a single shareholder, or small number of shareholders acting together, may be able to secure control over a corporation, even though they may hold considerably less than half of the total shares. When ownership of shares is widely diffused among a large number of shareholders, control may be secured by owning considerably less than half of the total shares.

- 5.115 However, it is not possible to stipulate a minimum shareholding below 50 per cent that will guarantee control in all cases. The minimum must vary depending upon the total number of shareholders, the distribution of shares among them, and the extent to which small shareholders take an active interest, etc. Therefore, in practice, private control (i.e., control by institutional units other than government units and public sector units) is determined to exist if an investor owns more than 50 percent of the voting power (i.e., more than half of equity) in a corporation. The control may be direct (through ownership of 50 percent or more voting power) or indirect (through ownership of corporations that in turn have control, since control can be passed down a chain of ownership as long as control exists at each stage of the chain). In the case of governments controlling corporations, a broader set of indicators for control may need to be taken into consideration; see paragraphs 5.121 – 5.124 below.

Subsidiary and associate corporations

- 5.116 It is common for corporations to own shares in other corporations, and certain interrelationships between corporations need to be specified for purposes of the SNA/BPM.

Subsidiary corporations

- 5.117 Corporation B is said to be a subsidiary of corporation A when corporation A controls more than half of the shareholders' voting power (i.e., more than half of equity) in corporation B.



- 5.118 Corporation A may be described as the parent corporation in this situation. As the relationship of a parent corporation to a subsidiary is defined in terms of control rather than ownership, the relationship must be transitive: that is, if C is a subsidiary of B and B is a subsidiary of A, then C must also be a subsidiary of A. If A has a majority shareholding in B while B has a majority shareholding in C, A cannot also have a majority shareholding in C. Nevertheless, A must be able to control C if it controls B. By analogy with families of persons, corporation B can be described as a first generation subsidiary of corporation A, and corporation C as a second generation subsidiary of A. Evidently, large families of corporations may be built up with any number of subsidiaries at each level or generation and also any number of generations. Very large families of corporations, described as conglomerates, are encountered in some countries. Conglomerates that include corporations resident in different countries are usually described as multinational enterprise groups.

Associate corporations

- 5.119 Corporation B is said to be an associate of corporation A when corporation A and its subsidiaries control between 10 per cent and 50 per cent of the shareholders' voting power in B so that A has some influence over the corporate policy and management of B.
- 5.120 By definition, a corporation is able to exert less influence over an associate corporation than over a subsidiary. Although some corporations may be able to exert considerable influence over their associates, this cannot be guaranteed. The relationship between associates is weaker than that between parent and subsidiary corporations, and groups of associates may not be well defined.

Government control of corporations

- 5.121 A corporation is a public corporation if a government unit, another public corporation, or some combination of government units and public corporations controls the entity, where control is defined as the ability to determine the general corporate policy of the corporation. The expression "general corporate policy" as used here is understood in a broad sense to mean the key financial and operating policies relating to the corporation's strategic objectives as a market producer.

- 5.122 Because governments exercise sovereign powers through legislation, regulations, orders and the like, care needs to be applied in determining whether the exercise of such powers amounts to a determination of the general corporate policy of a particular corporation and therefore control of the corporation. Laws and regulations applicable to all units as a class or to a particular industry should not be viewed as amounting to control of these units.
- 5.123 The ability to determine general corporate policy does not necessarily include the direct control of the day-to-day activities or operations of a particular corporation. The officers of such corporations would normally be expected to manage these in a manner consistent with and in support of the overall objectives of the particular corporation. Nor does the ability to determine the general corporate policy of a corporation include the direct control over any professional, technical or scientific judgments, as these would normally be viewed as part of the core competence of the corporation itself. For example, the professional or technical judgments exercised by a corporation set up to certify aircraft airworthiness would not be considered controlled in respect of individual approvals and disapprovals, though its broader operating and financial policies, including the airworthiness criteria, may well be determined by a government unit as part of the corporation's corporate policy.
- 5.124 Because the arrangements for the control of corporations can vary considerably, it is neither desirable nor feasible to prescribe a definitive list of factors to be taken into account. The following eight indicators, however, will normally be the most important and likely factors to consider:
- a. *Ownership of the majority of the voting interest.* Owning a majority of shares will normally constitute control when decisions are made on a one-share one-vote basis. The shares may be held directly or indirectly, and the shares owned by all other public entities should be aggregated. If decisions are not made on a one-share one-vote basis, the classification should be based on whether the shares owned by other public entities provide a majority voice.
 - b. *Control of the board or other governing body.* The ability to appoint or remove a majority of the board or other governing body as a result of existing legislation, regulation, contractual, or other arrangements will likely constitute control. Even the right to veto proposed appointments can be seen as a form of control if it influences the choices that can be made. If another body is responsible for appointing the directors, it is necessary to examine its composition for public influence. If a government appoints the first set of directors but does not control the appointment of replacement directors, the body would then be part of the public sector until the initial appointments had expired.
 - c. *Control of the appointment and removal of key personnel.* If control of the board or other governing body is weak, the appointment of key executives, such as the chief executive, chairperson and finance director, may be decisive. Non-executive directors may also be relevant if they sit on key committees such as the remuneration committee determining the pay of senior staff.
 - d. *Control of key committees of the entity.* Subcommittees of the board or other governing body could determine the key operating and financial policies of the entity. Majority public sector membership on these subcommittees could constitute control. Such membership can be established under the constitution or other enabling instrument of the corporation.

- e. *Golden shares and options.* A government may own a “golden share,” particularly in a corporation that has been privatized. In some cases, this share gives the government some residual rights to protect the interests of the public by, for example, preventing the company selling off some categories of assets or appointing a special director who has strong powers in certain circumstances. A golden share is not of itself indicative of control. If, however, the powers covered by the golden share do confer on the government the ability to determine the general corporate policy of the entity in particular circumstances, then the entity should be in the public sector from the date of existence of such circumstances. The existence of a share purchase option available to a government unit or a public corporation in certain circumstances may also be similar in concept to the golden share arrangement discussed above. It is necessary to consider whether, if the circumstance in which the option may be exercised exists, the volume of shares that may be purchased under the option and the consequences of such exercise means that the government has “the ability to determine the general corporate policy of the entity” by exercising that option. An entity’s status in general should be based on the government’s existing ability to determine corporate policy exercised under normal conditions rather than in exceptional economic or other circumstances such as wars, civil disorders or natural disasters.
- f. *Regulation and control.* The borderline between regulation that applies to all entities within a class or industry group and the control of an individual corporation can be difficult to judge. There are many examples of government involvement through regulation, particularly in areas such as monopolies and privatized utilities. It is possible for regulatory involvement to exist in important areas, such as in price setting, without the entity ceding control of its general corporate policy. Choosing to enter into or continue to operate in a highly regulated environment suggests that the entity is not subject to control. When regulation is so tight as to effectively dictate how the entity performs its business, then it could be a form of control. If an entity retains unilateral discretion as to whether it will take funding from, interact commercially with, or otherwise deal with a public sector entity, the entity has the ultimate ability to determine its own corporate policy and is not controlled by the public sector entity.
- g. *Control by a dominant customer.* If all of the sales of a corporation are to a single public sector customer or a group of public sector customers, there is clear scope for dominant influence. The presence of a minority private sector customer usually implies an element of independent decision-making by the corporation so that the entity would not be considered controlled. In general, if there is clear evidence that the corporation could not choose to deal with non-public sector clients because of the public sector influence, then public control is implied.
- h. *Control attached to borrowing from the government.* Lenders often impose controls as conditions of making loans. If the government imposed controls through lending or issuing guarantees that are more than would be typical when a healthy private sector entity borrows from a bank, control may be indicated. Similarly, control may be implied if only the government was prepared to lend.

5.125 Although a single indicator could be sufficient to establish control, in other cases, a number of separate indicators may collectively indicate control. A decision based on the totality of all indicators must necessarily be judgmental in nature but clearly similar judgements must be made in similar cases.

Control by a non-resident unit

5.126 In general, control is determined to exist through (i) an immediate (foreign) direct investment relationship where the direct investor owns more than 50 per cent of the voting power in the

(foreign) direct investment corporation; or (ii) an indirect (foreign) direct investment relationship arising from the ownership of voting power in one direct investment corporation that owns voting power in another corporation(s) – indirectly through a chain of control.

- 5.127 It is important to distinguish between control and influence. In this respect, a distinction is made between corporations where over 50 per cent of the equity is held by a direct investor (and thus controlled) versus those corporations where between 10 and 50 per cent of the equity is held abroad (i.e., significant degree of influence). All corporations with foreign holdings of 10 per cent or more are described as foreign direct investment enterprises and special treatment of their earnings is applied. Further details on this are given in chapters 8 and 33, 2025 SNA/chapter 12, BPM7. It is important to note, however, that while all foreign controlled corporations are foreign direct investment enterprises, the reverse is not true, for example even a publicly controlled corporation may be a foreign direct investment enterprise if, in addition to government controlling half of the equity, a further 10 per cent is owned by a non-resident.

C. NON-PROFIT INSTITUTIONS IN MACROECONOMIC STATISTICS

- 5.128 ***Non-profit institutions are legal or social entities, created for the purpose of producing goods and services, whose status does not permit them to be a source of income, profit or other financial gain for the units that establish, control or finance them.*** In practice, their productive activities are bound to generate either surpluses or deficits but any surpluses they happen to make cannot be appropriated by other institutional units. The articles of association by which they are established are drawn up in such a way that the institutional units that control or manage them are not entitled to a share in any profits or other income they receive. For this reason, they are frequently exempted from various kinds of taxes.

- 5.129 NPIs may be created by households, corporations, or government but the motives leading to their creation are varied. For example, NPIs may be created to provide services for the benefit of the households or corporations who control or finance them; or they may be created for charitable, philanthropic or welfare reasons to provide goods or services to other persons in need; or they may be intended to provide health or education services for a fee, but not for profit; or they may be intended to promote the interests of pressure groups in business or politics; etc.

1. THE CHARACTERISTICS OF NPIS

- 5.130 The main features of NPIs may be summarized as follows:

- a. Most NPIs are legal entities created by process of law whose existence is recognized independently of the persons, corporations or government units that establish, finance, control or manage them. The purpose of the NPI is usually stated in the articles of association or similar document drawn up at the time of its establishment. In some countries, especially developing countries, an NPI may be an informal entity whose existence is recognized by society but does not have any formal legal status; such NPIs may be created for the purpose of producing non-market goods or services for the benefit of individual households or groups of households.
- b. Many NPIs are controlled by associations whose members have equal rights, including equal votes on all major decisions affecting the affairs of the NPI. Members enjoy limited liability with respect to the NPI's operations.

- c. There are no shareholders with a claim on the profits or equity of the NPI. The members are not entitled to a share in any profits, or surplus, generated by the productive activities of the NPI, such profits being retained within the NPI.
- d. The direction of an NPI is usually vested in a group of officers, executive committee or similar body elected by a simple majority vote of all the members. These officers are the counterpart of the board of directors of a corporation and are responsible for appointing any paid managers.
- e. The term “non-profit institution” derives from the fact that the members of the association controlling the NPI are not permitted to gain financially from its operations and cannot appropriate any surplus that it may make. It does not imply that an NPI cannot make an operating surplus on its production.



- 5.131 In some countries NPIs are subject to preferential tax treatment, possibly to exemption from income tax, but this is not necessarily so and is not a determining factor in the identification of an NPI.
- 5.132 As in the case of producer units owned by government units, it is important to distinguish between NPIs engaged in market and non-market production as this affects the sector of the economy to which an NPI is allocated. NPIs do not necessarily engage in non-market production.

2. NPIS ENGAGED IN MARKET PRODUCTION

- 5.133 Market producers are producers that sell most or all of their output at prices that are economically significant, that is, at prices that have a significant influence on the amounts the producers are willing to supply and on the amounts purchasers wish to buy. Schools, colleges, universities, clinics, hospitals, etc. constituted as NPIs are market producers when they charge fees that are based on their production costs and that are sufficiently high to have a significant influence on the demand for their services. Their production activities must generate an operating surplus or loss. Any surpluses they make must be retained within the institutions as their status prevents them from distributing them to others. On the other hand, because of their status as “non-profit institutions” they are also able to raise additional funds by appealing for donations from persons, corporations or government. In this way, they may be able to acquire assets that generate significant property income in addition to their revenues from fees, thereby enabling them to charge fees below average costs. However, they must continue to be treated as market producers so long as their fees are determined mainly by their costs of production and are high enough to have a significant impact on demand. Such NPIs are not charities, their real objective often being to provide educational, health or other services of a very high quality using their incomes from endowments merely to keep down somewhat the high fees they have to charge.

Market NPIs serving enterprises

- 5.134 Some market NPIs restrict their activities to serving a particular subset of other market producers. Most market NPIs serving enterprises are created by associations of the enterprises whose interests they are designed to promote. They consist of chambers of commerce, agricultural, manufacturing or trade associations, employers’ organizations, research or testing

laboratories or other organizations or institutes that engage in activities that are of common interest or benefit to the group of enterprises that control and finance them. The NPIs often engage in publicity on behalf of the group, lobby politicians or provide advice or assistance to individual members in difficulty for one reason or another. The NPIs are usually financed by contributions or subscriptions from the group of enterprises concerned. The subscriptions are treated not as transfers but as payments for services rendered and these NPIs are, therefore, classified as market producers. However, as explained below, when chambers of commerce or similar organizations intended for the benefit of enterprises are controlled by government units, they are classified as non-market NPIs and allocated to the general government sector.

3. NPIS ENGAGED IN NON-MARKET PRODUCTION

- 5.135 The majority of NPIs in most countries are non-market rather than market producers. Non-market producers are producers that provide most of their output to others free or at prices that are not economically significant. Thus, NPIs engaged mainly in non-market production may be distinguished not only by the fact that they are incapable of providing financial gain to the units that control or manage them, but also by the fact that they must rely principally on funds other than receipts from sales to cover their costs of production or other activities. Their principal source of finance may be regular subscriptions paid by the members of the association that controls them or transfers or donations from third parties, including government or from property income.
- 5.136 NPIs engaged mainly in non-market production are divided into two groups: those NPIs controlled by government and those that are not. The former are included in the general government sector. The latter are described as “non-profit institutions serving households” (NPISHs) and constitute a separate sector in macroeconomic statistics.

Government control of non-profit institutions

- 5.137 Control of an NPI is defined as the ability to determine the general policy or programme of the NPI. All NPIs allocated to the general government sector should retain their identity as NPIs in statistical records, to facilitate analysis of the complete set of NPIs. To determine if an NPI is controlled by the government, the following five indicators of control should be considered:
- a. *The appointment of officers.* The government may have the right to appoint the officers managing the NPI either under the NPI’s constitution, its articles of association or other enabling instrument.
 - b. *Other provisions of enabling instrument.* The enabling instrument may contain provisions other than the appointment of officers that effectively allow the government to determine significant aspects of the general policy or programme of the NPI. For example, the enabling instrument may specify or limit the functions, objectives and other operating aspects of the NPI, thus making the issue of managerial appointments less critical or even irrelevant. The enabling instrument may also give the government the right to remove key personnel or veto proposed appointments, require prior approval of budgets or financial arrangements by the government, or prevent the NPI from changing its constitution, dissolving itself, or terminating its relationship with government without government approval.

- c. *Contractual agreements.* The existence of a contractual agreement between a government and an NPI may allow the government to determine key aspects of the NPI's general policy or programme. As long as the NPI is ultimately able to determine its policy or programme to a significant extent, such as by being able to renege on the contractual agreement and accept the consequences, by being able to change its constitution or dissolve itself without requiring government approval other than that required under the general regulations, then it would not be considered controlled by government.
 - d. *Degree of financing.* An NPI that is mainly financed by government may be controlled by that government. Generally, if the NPI remains able to determine its policy or programme to a significant extent along the lines mentioned in the previous indicator, then it would not be considered controlled by government.
 - e. *Risk exposure.* If a government openly allows itself to be exposed to all, or a large proportion of, the financial risks associated with an NPI's activities, then the arrangement constitutes control. The criteria are the same as in the previous two indicators.
- 5.138 A single indicator could be sufficient to establish control in some cases, but in other cases, a number of separate indicators may collectively indicate control. A decision based on the totality of all indicators will necessarily be judgmental in nature.

NPIs serving households (NPISHs)

- 5.139 ***Non-profit institutions serving households (NPISHs) consist of non-market NPIs that are not controlled by government.*** They provide goods and services to households free or at prices that are not economically significant. Most of these goods and services represent individual consumption but it is possible for NPISHs to provide collective services.

D. THE NON-FINANCIAL CORPORATIONS SECTOR AND ITS SUBSECTORS

- 5.140 ***Non-financial corporations are corporations whose principal activity is the production of market goods or non-financial services.*** The non-financial corporations sector is composed of the following set of resident institutional units:
- a. All resident non-financial corporations (as understood in macroeconomic statistics and not just restricted to legally constituted corporations), regardless of the residence of their shareholders;
 - b. The branches of non-resident enterprises that are engaged in non-financial production on the economic territory on a long-term basis;
 - c. All resident NPIs that are market producers of goods or non-financial services.
- 5.141 Sectors are groups of institutional units, and the whole of each institutional unit must be classified to one or another sector even though that unit may be engaged in more than one type of economic activity. Some non-financial corporations or quasi-corporations may have secondary financial activities: for example, producers or retailers of goods may provide

consumer credit directly to their own customers. As explained more fully below, such corporations or quasi-corporations are nevertheless classified as belonging in their entirety to the non-financial corporate sector provided their principal activity is non-financial.

- 5.142 Two classification criteria are used to subsector the non-financial corporations sector. One criterion is to show NPIs separately from other units in the sector. These units other than NPIs may be described as for profit institutions (FPIs). The second criterion is that of control to show:
- a. Public non-financial corporations,
Of which: public corporations which are part of a domestic multinational enterprise
 - b. National private non-financial corporations,
Of which: national private corporations which are part of a domestic multinational enterprise,
and
 - c. Foreign controlled non-financial corporations.
- 5.143 The criteria for control of corporations and NPIs by government and non-resident units are described in detail in section B. Corporations controlled by non-resident units are described as being foreign controlled.
- 5.144 The full subsectoring of the non-financial corporations sector can be seen as a two-way table as shown in [table 5.2](#). The exact form of presentation of the subsectors will depend on both analytical and statistical considerations. It may be that the number of NPIs is such that some control categories are empty or sufficiently sparse that the detail cannot be shown for reasons of confidentiality. At the least, it is recommended to compile data for the left-most column based on control, to monitor the impact of globalization on the generation and distribution of income, and on the accumulation of assets and liabilities. It is also considered useful to distinguish the entries for the bottom row of [table 5.2](#).



Table 5.2 (2025 SNA): Subsectors of the non-financial corporations sector (= Updated version of Table 4.1 in the 2008 SNA)

| Non-financial corporations | FPIs | NPIs |
|---|---------------------------------------|---------------------------------------|
| Public non-financial corporations Of which: Part of a domestic multinational enterprise | Public non-financial FPIs | Public non-financial NPIs |
| Private non-financial corporations Of which: Part of a domestic multinational enterprise | Private non-financial FPIs | Private non-financial NPIs |
| Foreign-controlled non-financial corporations Of which: Special Purpose Entities (SPEs) | Foreign-controlled non-financial FPIs | Foreign-controlled non-financial NPIs |
| Total non-financial corporations | Total non-financial FPIs | Total non-financial NPIs |

E. THE FINANCIAL CORPORATIONS SECTOR AND ITS SUBSECTORS

5.145 ***Financial corporations consist of all resident corporations that are principally engaged in providing financial services, including insurance and pension funding services, to other institutional units.*** In addition, due to its important role in the financial system, the central bank, although predominantly producing non-market services for the society as a whole, is also treated as a financial corporation. The financial corporations sector is composed of the following set of resident institutional units:

- a. All resident financial corporations (as understood in macroeconomic statistics and not just restricted to legally constituted corporations), regardless of the residence of their shareholders;
- b. The branches of non-resident corporations that are engaged in financial activity on the economic territory on a long-term basis;
- c. All resident NPIs that are market producers of financial services.

- 5.146 Apart from the collective non-market services produced by the central bank, the production of financial services is the result of financial intermediation, financial risk management, liquidity transformation or auxiliary financial activities. Because the provision of financial services is typically subject to strict regulation, it is usually the case that units providing financial services do not produce other goods and services and financial services are not provided as secondary production.
- 5.147 One form of financial innovation has seen a substantial growth in activity of a kind traditionally carried out by, or through, financial corporations but that may also be done directly by non-financial enterprises themselves. For example, there is a tendency in some countries for producers or retailers of goods to provide consumer credit directly to their customers. Another example is the tendency for non-financial enterprises in some countries to raise funds themselves by selling their own obligations directly on the money or capital markets. However, the enterprise as a whole must continue to be classified as non-financial provided that:
- a. A non-financial enterprise does not create a new institutional unit, such as a subsidiary corporation, to carry out the financial activity; and
 - b. The financial activity remains secondary to the principal activity of the enterprise.
- 5.148 The same principle applies to the subsectoring of financial corporations. For example, many deposit-taking corporations also engage in financial auxiliary services. However, as a single institutional unit, the commercial bank as a whole, including its financial auxiliary type of activities, is classified in the subsector “deposit-taking corporations except the central bank”. For the same reason, central bank or monetary authority-type functions carried out by agencies within the central government that are not separate institutional units from government are not allocated to the central bank subsector. This is discussed further in section F and in chapter 30.
- 5.149 The financial corporations sector is divided into nine subsectors in the system of national accounts and external sector statistics, according to its activity in the market and the liquidity of its liabilities. These nine subsectors are shown in [table 5.1 \(2025 SNA\)/table 4.1 \(BPM7\)](#) and each is described later in this section.
- 5.150 The nine subsectors of financial corporations are arranged in the following ways in external accounts:
- a. The standard components use three subsectors (shown in table 4.2, BPM7): the central bank, deposit-taking corporations except the central bank, and the other seven subsectors combined as “other financial corporations.” Additional details can be compiled according to circumstances.
 - b. The functional category classification of debt positions between affiliated financial intermediaries is defined in terms of the first five subsectors of the financial sector—that is, the central bank, deposit-taking corporations except the central bank, money market funds (MMFs), non-MMF investment funds, and other financial intermediaries (except insurance corporations and pension funds). Such debt is excluded from direct investment, as discussed in [paragraph 6.28](#).

- 5.151 Although the financial corporations sector and its subsectors are defined in terms of economic function, data sources may tend to follow regulatory definitions. Differences between regulatory and statistical definitions should be monitored, and adjustments made, where necessary.
- 5.152 As well as being subsectored according to the nature of the financial activity being undertaken, the financial corporations sector can also be subsectored in the same manner as the non-financial corporations sector to show which units are subject to public control (including, as an of which item, those which are part of a domestic multinational enterprise), which are national private corporations (including, as an of which items, those which are part of a domestic multinational enterprise), and which are foreign controlled. In addition, each of these subsectors could be broken down further, to show the difference between NPIs and FPIs. Thus in principle each of the rows in table 5.2 may be further disaggregated in the manner of table 5.1 though it is unlikely that all possible cross-classifications exist and a compressed subsectoring based on local circumstance and particular analytical interest may be sufficient. In this respect, it is recommended, however, to have a breakdown of the financial corporations sector as a whole into the subsectors based on control.
- 5.153 The recommended breakdown according to the nature of financial activity may not be sufficient to capture new developments in the financial world, in particular the expansion of financial institutions involved in non-bank financial intermediation. For this reason, further breakdowns of the subsectors of the financial corporations sector, as well as further details for a number of financial instruments, are encouraged as supplementary items. This is discussed further in chapter 29.
- 5.154 “Fintech” refers to technology-enabled innovation in financial services that could result in new business models, applications, processes, or products with an associated material effect on the provision of financial services. Countries where these activities are significant are encouraged to compile further breakdowns of relevant subsectors, as supplementary items. This is discussed further in chapter 22. In external accounts, identification of “of which” category for fintech companies within the subsector classification is recommended.

1. CENTRAL BANK

- 5.155 ***The central bank is the financial institution (or institutions) that exercises control over key aspects of the financial system. Their principal functions generally include conducting monetary policy, including by issuing currency and regulating money supply and credit; managing international reserves and the payments system; promoting financial stability, including regulation and macroprudential supervision; and acting as banker to government.*** In general, the following financial institutions are classified in this subsector:
- a. The national central bank, including where it is part of a system of central banks, which in most economies are separately identifiable institutions that are subject to varying degrees of government control, engage in differing sets of activities, and are designated by various names (e.g., central bank, reserve bank, national bank, or state bank).
 - b. Currency boards or independent currency authorities that issue national currency that is fully backed by foreign exchange reserves.

- c. Central monetary agencies of essentially public origin (for example, agencies managing foreign exchange or issuing bank notes and coin) that keep a complete set of accounts but are not classified as part of central government.
- d. National agencies, including notional resident units, of centralized currency unions. (More details on the recording of transactions and positions of these units are provided in section I.)

As long as the central bank is a separate institutional unit, it is always allocated to the financial corporations sector even if it is primarily a non-market producer.

- 5.156 If an institutional unit is mainly engaged in central banking activities, the entire unit is classified in the central bank subsector. Many central banks regulate and/or supervise other deposit-taking corporations and sometimes also other financial corporations, and these central bank activities also are included in the central bank subsector. However, if such activities are performed by a separate institutional unit, or units, that are affiliated with the government or with other sectors and if they are mainly engaged in regulating or supervising financial units, they are classified as financial auxiliaries rather than as units in the central bank subsector.
- 5.157 A few economies do not have central banks. Typical central banking activities that are performed by general government and cannot be separated into specific institutional units are treated as part of general government and are not allocated to the central bank subsector.
- 5.158 In economies in which some central banking functions are performed wholly or partly outside the central bank, particularly holding reserve assets, consideration should be given to compiling supplementary data for the monetary authorities.

2. DEPOSIT-TAKING CORPORATIONS EXCEPT THE CENTRAL BANK

- 5.159 ***Deposit-taking corporations except the central bank have financial intermediation as their principal activity. To this end, they have liabilities in the form of deposits or financial instruments (such as short-term certificates of deposit) that are close substitutes for deposits.*** The liabilities of deposit-taking corporations are typically included in measures of money broadly defined.
- 5.160 In general, the following financial intermediaries are classified in this subsector:
 - a. Commercial banks, “universal” banks, “all-purpose” banks;
 - b. Savings banks (including trustee savings banks and savings and loan associations);
 - c. Post office giro institutions, post banks, giro banks;
 - d. Rural credit banks, agricultural credit banks;

- e. Cooperative credit banks, credit unions;
- f. Electronic money institutions with liabilities part of broad money;
- g. Specialized banks or other financial corporations if they take deposits or issue close substitutes for deposits; and
- h. Traveler's check companies that mainly engage in financial intermediation; and
- i. Offshore banks which are incorporated or registered in the country.

5.161 The liabilities of deposit-taking corporations to residents are typically included in measures of broad money, even though the SNA/BPM does not provide a definition of broad money, which may differ across constituencies (see paragraph ...). The money-issuing sector may be identified on a supplementary basis to assist in reconciliation with monetary data. It consists of the central bank plus deposit-taking corporations plus other institutions that issue liabilities included in the definition of broad money (e.g., money market funds).

5.162 Electronic money institutions are entities authorized to issue electronic money, which is a payment instrument whereby monetary value is electronically stored on a physical device or remotely at a server. They should be classified as depository corporations, if they are a financial corporation and if the electronic money issued is included in broad money. Electronic money can usually be used for payments to third parties and is, therefore, a close substitute for transferable deposits. Monetary value stored on specific prepaid instruments does not represent electronic money if the instruments are designed to address specific needs only and can be used only in a limited way.

3. MONEY MARKET FUNDS (MMFS)

5.163 **Money market funds (MMFs) are collective investment schemes that raise funds by issuing shares or units to the public. The proceeds are invested primarily in money market instruments, MMF shares or units, transferable debt instruments with a residual maturity of not more than one year, bank deposits and instruments that pursue a rate of return that approaches the interest rates of money market instruments. MMF shares can often be transferred by cheque or other means of direct third-party payment.** Because of the nature of the instruments the schemes invest in, their shares or units may be regarded as close substitutes for deposits.

5.164 Unit trusts or investment trusts primarily investing in similar instruments as the ones referred to in the above paragraph are also classified as money market funds, unless the investors are restricted to a particular group of entities. Corporations taking care of the management and administration of MMFs are generally classified as financial auxiliaries.

4. NON-MMF INVESTMENT FUNDS

5.165 **Non-MMF investment funds are collective investment schemes that raise funds by issuing share or units to the public, and investing predominantly in longer-term financial assets, such as equity shares, bonds, mortgage loans, and non-financial assets.**

Investment fund shares or units are generally not close substitutes for deposits. They are not transferable by means of cheque or direct third-party payments. Investment funds can be open or closed ended. Open-ended funds or open funds are those whose shares or units are, at the request of the holders, repurchased or redeemed directly or indirectly out of the undertaking's assets. Closed-ended funds or closed funds are open for subscription only during a specified period at the launch of the scheme; thereafter investors can acquire shares only by buying them on a secondary market (directly or sometimes even on an exchange) from other investors. Closed-ended investment funds issue a limited number of shares or units. New shares or units are rarely issued once the fund has been launched. Investment funds may be constituted as follows: (a) under the law of contract (as common funds managed by management companies), (b) under trust law (as unit trusts), (c) under a statute (as investment companies), or (d) otherwise with similar effect. Fund managers of investment funds are generally classified as financial auxiliaries (see paragraphs 5.171 – 5.173).

- 5.166 Hedge funds are a kind of investment fund. Hedge fund is a term that covers a heterogeneous range of collective investment schemes, typically involving high minimum investments, light regulation, and a wide range of investment strategies, via leverage.
- 5.167 Special purpose government funds, usually called sovereign wealth funds, are more likely to be classified as captive financial institutions (see paragraphs 5.174 – 5.175). The same holds for trusts set up to manage wealth of a limited group of beneficiaries (see paragraph 5.107).
- 5.168 Unit trusts or investment trusts primarily investing in similar instruments as the ones referred to in paragraph 5.160 are also classified as non-MMF investment funds, unless the investors are restricted to a particular group of entities. Corporations taking care of the management and administration of MMFs are generally classified as financial auxiliaries.
- 5.169 Funds that own, and rent out, dwellings and/or commercial property, are classified as providers of rental and other types of real estate services, and not as providers of financial services. As providers of non-financial services, they are classified in the non-financial corporations sector, and not as financial corporations. On the other hand, investment funds that primarily invest in debt and equity instruments in companies that own, and rent out, dwellings and/or commercial property would qualify as non-MMF investment funds. This also holds for investment funds that directly invest in real estate in other economies, in which case the investments are recorded as investments in equity of notional non-resident units. In the case of hybrid real estate investment funds, the units would need to be classified according to their principal activity, i.e., the activity which accounts for most of the value added. As value added from real estate activities is typically much larger than the fees related to investments in financial instruments, even though most administration and maintenance services may be outsourced to specialized entities, these hybrid funds will typically end up in the non-financial corporations sector.
- 5.170 Investment funds that directly invest in other non-financial assets, such as some crypto assets, gold and other valuable metals, or high-end wines and whiskies, are classified as non-MMF investment funds, because the main part of their returns on the invested assets will relate to holding gains, and does not consist of the production of non-financial services.
- 5.171 In the case of fund-of-funds, i.e., investment funds only investing in other funds, a distinction should be made between “fettered” fund-of-funds, which only invest in funds that are managed and administered by the same management company, versus “non-fettered” funds, which invest in any fund, even those managed by competing companies. In the latter case, the

relevant funds should be treated as separate institutional units. In the former case, the fund-of-funds and the individual funds would typically share the same management company, which is to be classified in subsector S.126 Financial auxiliaries. However, this would not necessarily call for a consolidation of the fund-of-funds and the individual funds, because the latter may also have shareholders other than the fund-of-funds. A particular case, where a consolidation could be analytically useful, is one in which a fettered fund-of-funds invests in individual funds with no participation, as shareholders, by third parties.

- 5.172 In the case of asset management provided by commercial banks, regarding which the risks and rewards of the assets managed are with the investor(s), the assets should be consolidated with the accounts of the investor, if it concerns a single institutional unit (e.g., if the asset management is customised to the client, like in “managed accounts” of private banking services to wealthy clients), or a separate institutional unit, to be classified as either money-market funds or non-MMF investment funds, should be distinguished, assuming that the relevant assets (and liabilities) can be separated out of the accounts of the relevant banks. See also the decision tree in [Figure 5.2](#).
- 5.173 [Also](#) in line with the decision tree in [Figure 5.2](#), investment funds which are set up and/or owned by another institutional investor, such as a pension scheme, should be consolidated with the investor, if the investment fund only serves a single investor, unless the fund clearly has autonomy of decision. In the case it concerns a non-resident fund, then it should be classified in subsector S.127 Captive financial institutions and money lenders. Autonomy of decision would primarily concern the degree of autonomy in making decisions on the investment policy, either or not restricted by more general policy guidance.
5. OTHER FINANCIAL INTERMEDIARIES, EXCEPT INSURANCE CORPORATIONS AND PENSION FUNDS (ICPFS)
- 5.174 ***Other financial intermediaries except insurance corporations and pension funds consist of financial corporations that are engaged in providing financial services by incurring liabilities, in forms other than currency, deposits or close substitutes for deposits, on their own account for the purpose of acquiring financial assets by engaging in financial transactions on the market.*** It is a feature of a financial intermediary that transactions on both sides of the balance sheet are carried out in open markets.
- 5.175 In general, the following financial intermediaries are classified in this subsector:
- a. Financial corporations engaged in the securitization of assets. Securitization involves raising funds by selling a security backed by specific assets or income streams. For example, an originating mortgage lender could sell a portfolio of loans to a securitization vehicle that issues securities sold to investors. The originator may continue to provide administrative services, but the vehicle is the legal owner of the portfolio. Such vehicles are included in “other financial intermediaries, except insurance corporations and pension funds” if the entity is the legal owner of a portfolio of assets, sells a new financial asset that represents an interest in the portfolio, and has or potentially has a full set of accounts. However, in cases in which the originator issues asset-backed securities on its own books, then securitization may take place without the creation of a separate entity. When the portfolio is not transformed, or the vehicle does not bear market or credit risks, then it can be combined with its parent (if resident in the same economy) or treated as a captive financial institution (if in a different economy to that of its parent).

- b. Underwriters, security and derivative dealers (operating on own account). In contrast, security brokers and other units that arrange trades between buyers and sellers but do not purchase and hold securities on their own account are classified as financial auxiliaries (see paragraph 5.173 (b));
- c. Financial corporations engaged in lending, including the finance associates of retailers, who may be responsible for financial leasing and both personal or commercial finance;
- d. Central clearing counterparties. These organizations provide clearing and settlement transactions in securities and derivatives. Clearing refers to the process of offsetting obligations and entitlements vis-à-vis counterparties to transactions so that settlement – which involves the actual exchange of securities, derivatives, and funds – can occur more efficiently on a net basis. The central clearing counterparties involve themselves in the transaction and mitigate counterparty risk;
- e. Specialized financial corporations that assist other corporations in raising funds in equity and debt markets and provide strategic advisory services for mergers, acquisitions, and other types of financial transactions. (These corporations are sometimes called “investment banks.”) In addition to assisting with the raising of funds for their corporate clients, such corporations invest their own funds, including in private equity, in hedge funds dedicated to venture capital, and in collateralized lending. However, if such corporations take deposits or close substitutes for deposits, they are classified as deposit-taking corporations;
- f. Bank restructuring agencies; and
- g. Specialized financial corporations that provide:
 - Short-term financing for corporate mergers and takeovers;
 - Export/import finance;
 - Factoring services;
 - Venture capital and development capital firms.

6. FINANCIAL AUXILIARIES

5.176 ***Financial auxiliaries consist of financial corporations that are principally engaged in activities associated with transactions in financial assets and liabilities or with providing the regulatory context for these transactions but in circumstances that do not involve the auxiliary taking ownership of the financial assets and liabilities being transacted.***

5.177 Corporations facilitating financial transactions, such as central clearing counterparties, stock exchanges, derivative exchanges, and repurchase agreement settlement institutions are classified as financial auxiliaries, if they do not act as principals to the counterparties to the underlying transactions; if they act as principals to the counterparties, they are classified as financial intermediaries.

5.178 In general, the following financial entities are classified in this subsector:

- a. Insurance brokers, salvage and claims adjusters (whether employed by the insurance company, an independent adjuster or a public adjuster employed by the policyholder), insurance and pension consultants;
- b. Loan brokers, securities brokers that arrange trades between security buyers and sellers but that do not purchase and hold securities on their own account, investment advisers, and so on (securities dealers that trade in securities on their own account are other financial intermediaries);
- c. Flotation corporations that manage the issue of securities;
- d. Corporations whose principal function is to guarantee, by endorsement, bills and similar instruments;
- e. Corporations that arrange derivative and hedging instruments, such as swaps, options and futures (without issuing them);
- f. Corporations providing infrastructure for financial markets such as securities depository companies, custodians, clearing offices facilitating transactions without acting as the counterparty (in contrast, central clearing counterparties, as discussed in paragraph 5.170 (d), are counterparties and thus classified as intermediaries rather than auxiliaries), and nominee companies;
- g. Managers of pension funds, investment funds including mutual funds and other funds, etc. (but not the funds they manage);
- h. Stock exchanges, insurance exchanges, and commodity and derivative exchanges; crypto exchanges that facilitate in buying and selling of different crypto assets;
- i. Foreign exchange bureaus;
- j. Crowd funding platforms;
- k. Non-profit institutions recognized as independent legal entities serving financial corporations;
- l. Head offices of financial corporations that are principally engaged in controlling financial corporations or groups of financial corporations but that do not themselves conduct the business of financial corporations;
- m. Central supervisory authorities of financial intermediaries and financial markets when they are separate institutional units.
- n. Corporations primarily involved in operation of electronic payment mechanisms that do not

incur liabilities against the instruments (if they do incur liabilities against the instruments, then they are other financial intermediaries except insurance corporations and pension funds);

- o. Resident offices of foreign financial institutions that do not accept deposits or extend credit on their own account; and
- p. Credit rating agencies

7. CAPTIVE FINANCIAL INSTITUTIONS AND MONEY LENDERS

5.179 ***Captive financial institutions and money lenders consist of institutional units providing financial services, where most of either their assets or liabilities are not transacted on open financial markets.*** It includes entities transacting within only a limited group of units (such as with subsidiaries) or subsidiaries of the same holding corporation or entities that provide loans from own funds provided by only one sponsor. Other financial intermediaries, except insurance corporations and pension funds (discussed in paragraphs 5.169 – 5.170) are distinguished from captive financial institutions and money lenders in that the latter serve a limited group only for at least one side of their balance sheet.

5.180 In general, the following financial corporations are classified in this subsector:

- a. Holding corporations that hold only the assets (owning controlling-levels of equity) of a group of subsidiary corporations and whose principal activity is owning the group without providing any other service to the enterprises in which the equity is held, that is, they do not administer or manage other units.
- b. Special purpose units that qualify as institutional units and raise funds in open markets to be used by their parent corporation.
- c. Units which provide financial services exclusively with own funds, or funds provided by a sponsor to a range of clients and incur the financial risk of the debtor defaulting, including



- Moneylenders.
 - Corporations engaged in lending (for example providing student loans, import/export loans) from funds received from a sponsor such as a government unit or non-profit institution.
 - Pawnshops that predominantly engage in lending.
- d. Conduits, intragroup financiers, and treasury functions when these functions are undertaken by a separate institutional unit. Conduits typically refer to entities that raise funds, which could be debt securities, shares or partnership interest, on open financial markets for passing on to other affiliated corporations. Often, the conduit's liabilities are guaranteed by a parent company.
 - e. Entities such as trusts and similar wealth-holding entities, estates, or agencies accounts that

solely hold assets and liabilities, along with the associated property income, for a restricted group of investors or beneficiaries. In the case of a single investor or beneficiary assuming the risks and rewards, the accumulated assets should be assigned to the sector of the investor or beneficiary, unless the unit is resident in another economy than its beneficiary/investor.

8. INSURANCE CORPORATIONS (ICS)

5.181 ***Insurance corporations consist of incorporated, mutual and other entities whose principal function is to provide life, accident, sickness, fire or other forms of insurance to individual institutional units or groups of units or reinsurance services to other insurance corporations.*** Captive insurance is included, that is, an insurance company that serves only its owners. Deposit insurers, issuers of deposit guarantees and other issuers of standardized guarantees that are separate entities and act like insurers by charging premiums and have reserves, are classified as insurance corporations. More details on the recording of insurance are provided in chapter 24, 2025 SNA/Annex 8, BPM7.

9. PENSION FUNDS (PFS)

5.182 Pension liabilities arise when an employer or government obliges or encourages members of households to participate in a social insurance scheme that will provide income in retirement. They may also arise from collective employer-independent schemes, such as schemes for self-employed persons. The social insurance schemes may be organized by employers or by government, they may be organized by insurance corporations on behalf of employers or separate institutional units may be established to hold and manage the assets to be used to meet the pensions and to distribute the pensions. ***The pension fund subsector consists of only those social insurance pension funds that are institutional units separate from the units that create them.*** More details on the institutional unit test as well as the classification and recording of pension schemes are provided in chapter 24.

F. THE GENERAL GOVERNMENT SECTOR AND ITS SUBSECTORS

1. GOVERNMENT UNITS AS INSTITUTIONAL UNITS

5.183 Government units are unique kinds of legal entities established by political processes that have legislative, judicial or executive authority over other institutional units within a given area. Viewed as institutional units, the principal functions of government are to assume responsibility for the provision of goods and services to the community or to individual households and to finance their provision out of taxation or other incomes, to redistribute income and wealth by means of transfers, and to engage in non-market production. In general terms:

- a. A government unit usually has the authority to raise funds by collecting taxes or compulsory transfers from other institutional units. In order to satisfy one of the basic requirements of an institutional unit in macroeconomic statistics, a government unit, whether at the level of the total economy, a region or a locality, must have funds of its own either raised by taxing other units or received as transfers from other government units and the authority to disburse some, or all, of such funds in the pursuit of its policy objectives;

- b. Government units typically make three different kinds of final outlays:
- The first group consists of actual or imputed expenditures on the free provision to the community of collective services such as public administration, defence, law enforcement, etc. that are organized collectively by government and financed out of general taxation or other income;
 - The second group consists of expenditures on the provision of goods or services free, or at prices that are not economically significant, to individual households. These expenditures related to, for example, education and health, are deliberately incurred and financed out of taxation or other income by government in the pursuit of its social or political objectives, even though individuals could be charged according to their usage;
 - The third group consists of transfers paid to other institutional units, mostly households, in order to redistribute income or wealth.
- 5.184 Within a single territory there may be many separate government units when there are different levels of government, specifically central, state or local governments. In addition, social security funds also constitute government units. These different kinds of government units are described later when the subsectoring of the general government sector is explained.

Government units as producers

- 5.185 The fact that governments choose to supply not only collective services but also many goods and individual services free, or at prices that are not economically significant, to households or other units does not necessitate that they produce them themselves. Even in the case of most collective services, or so-called “public goods”, governments are obliged only to assume responsibility for organizing and financing their production. They are not obliged to produce them. However, government units do usually engage in a wide range of productive activities in practice, covering not only collective services but also many other goods and individual services. Because it is largely a matter of political choice, the range of goods and services produced by government units varies greatly from one country to another. Apart from some collective services such as public administration and defence, it is therefore difficult to categorize certain types of production, such as the production of education or health services, as intrinsically governmental, even though they are often produced by government units.
- 5.186 When a government unit wishes to intervene through the production of goods and services it has four options:
- a. it may create a public corporation whose corporate policy, including pricing and investment, it is able to control;
 - b. it may create an NPI that it controls;
 - c. it may produce the goods or services itself in an establishment that it owns but that does not exist as a separate legal entity from the government unit itself;

- d. it may create or enter into a public private partnership (PPP); see chapter 30 for more details.
- 5.187 However, a government establishment, or group of establishments engaged in the same kind of production under common management, should be treated as a quasi-corporation if the following three criteria hold:
- a. the unit charges prices for its outputs that are economically significant;
 - b. the unit is operated and managed in a similar way to a corporation; and
 - c. the unit has a complete set of accounts that enable its operating surpluses, savings, assets and liabilities to be separately identified and measured.
- 5.188 Such quasi-corporations are market producers that are treated as separate institutional units from the government units that own them. They are classified, sectored and subsectored in the same way as public corporations.
- 5.189 In order to be treated as a quasi-corporation the government must allow the management of the enterprise considerable discretion not only with respect to the management of the production process but also the use of funds. Government quasi-corporations must be able to maintain their own working balances and business credit and be able to finance some or all of their capital formation out of their own savings, depreciation reserves or borrowing. The ability to distinguish flows of income and capital between quasi-corporations and government implies that their operating and financing activities are not fully integrated with government revenue or finance statistics in practice, despite the fact that they are not separate legal entities.
- 5.190 Producer units of government that cannot be treated as quasi-corporations, like all unincorporated enterprises that cannot be separated from their owners, remain in the same institutional unit as the owner, in this case within the general government sector. They are likely to consist largely, or entirely, of non-market producers: that is, producers most or all of whose output is supplied to other units free, or at prices that are not economically significant. In addition to providing non-market goods or services to the general public, such units may include government producers supplying non-market goods or services to other government units for purposes of intermediate consumption or gross fixed capital formation: for example, munitions factories, government printing offices, transport agencies, computer or communications agencies, etc. However, it is possible for an unincorporated enterprise within a government to be a market producer. The example often quoted is that of a bookshop within a museum.

Social security schemes and social security funds

- 5.191 Social security schemes are social insurance schemes that cover the community as a whole or large sections of the community and are imposed and controlled by government units. The schemes cover a wide variety of programmes, providing benefits in cash or in kind for old age, invalidity or death, survivors, sickness and maternity, work injury, unemployment, family allowance, health care, etc. There is not necessarily a direct link between the amount of the contribution paid by an individual and the benefits he or she may receive.

5.192 When social security schemes are separately organized from the other activities of government units and hold their assets and liabilities separately from the latter and engage in financial transactions on their own account, they qualify as institutional units that are described as social security funds. However, institutional arrangements in respect of social security schemes differ from country to country and in some countries they may become so closely integrated with the other finances of government as to bring into question whether they should be treated as separate institutional units.

5.193 The amounts raised, and paid out, in social security contributions and benefits may be deliberately varied in order to achieve objectives of government policy that have no direct connection with the concept of social security as a scheme to provide social benefits to members of the community. They may be raised or lowered in order to influence the level of aggregate demand in the economy, for example. Nevertheless, so long as they remain separately constituted funds, they must be treated as separate institutional units in macroeconomic statistics.

2. THE GENERAL GOVERNMENT SECTOR

5.194 The general government sector consists of the following groups of resident institutional units:

- a. All units of central, state or local government (as described immediately below);
- b. All non-market producers that are controlled by government units.

5.195 The sector also includes social security funds, either as separate institutional units or as part of any or all of central, state or local government. The sector does not include public corporations, even when all the equity of such corporations is owned by government units. Nor does it include quasi-corporations that are owned and controlled by government units. However, unincorporated enterprises owned by government units that are not quasi-corporations remain integral parts of those units and, therefore, must be included in the general government sector.

5.196 If a government uses an entity that is resident in the economic territory of another government to carry out general government activities (i.e., fiscal activities, rather than for a public corporation), that entity is not included as part of the general government in either its economy of residence or the economy of the government that uses the entity. Such entities are not treated in the same way as embassies and other territorial enclaves if they are created and operate under the laws of the host economy. These entities are treated as direct investment enterprises of the government that owns them and classified as separate institutional units in the economy where they are established. See also paragraphs 5.100 – 5.102, and paragraph 6.xx, BPM7. Non-resident international joint ventures between governments, where neither party has control of the entity, are apportioned to governments as notional resident units.

3. SUBSECTORS OF THE GENERAL GOVERNMENT SECTOR

5.197 A full subsectoring of the general government would allow for all government units, including social security funds, to be distinguished for each of central, state and local government. In practice, though, it is usual to show all social security funds together as one subsector or to merge them all with their appropriate level of government and not show social security funds

by level of government separately. Further, NPIs may be shown as an “of which” item for general government as a whole or for central, state and local government individually.

5.198 The first method of subsectoring general government is as follows:

- a. Central government;
- b. State government;
- c. Local government;
- d. Social security funds,

where it is understood that each of the subsectors a, b and c include government controlled non-market producers but exclude social security funds at that level of government.

5.199 The second method of subsectoring general government is as follows:

- a. Central government;
- b. State government;
- c. Local government,

where it is understood that each of the subsectors a, b and c include both government controlled non-market producers and social security funds at that level of government.

5.200 Under either method of subsectoring, NPIs should be shown as an “of which” heading under the appropriate level of government.

5.201 The choice between the two methods of subsectoring depends mainly on the size, or importance, of social security funds within a country and on the way in which they are managed.

5.202 In some countries there may not exist a proper intermediate level of government between central and local government, in which case the subsector “state government” is not distinguished. In others there may be more than two levels of government below the central government. In that case, the lower levels should be aggregated with state or local government as appropriate.

Central government

- 5.203 The central government subsector consists of the institutional unit or units making up the central government plus those non-market producers that are controlled by central government.
- 5.204 The political authority of central government extends over the entire territory of the country. Central government has therefore the authority to impose taxes on all resident and non-resident units engaged in economic activities within the country. Its political responsibilities include national defence, the maintenance of law and order and relations with foreign governments. It also seeks to ensure the efficient working of the social and economic system by means of appropriate legislation and regulation. It is responsible for providing collective services for the benefit of the community as a whole, and for this purpose incurs expenditures on defence and public administration. In addition it may incur expenditures on the provision of services, such as education or health, primarily for the benefit of individual households. Finally, it may make transfers to other institutional units, namely to households, NPIs, corporations and other levels of government.
- 5.205 Central government is a large and complex subsector in most countries. It is generally composed of a central group of departments or ministries that make up a single institutional unit plus, in many countries, other institutional units. The departments may be responsible for considerable amounts of expenditure within the framework of the government's overall budget, but often they are not separate institutional units capable of owning assets, incurring liabilities, engaging in transactions, etc., independently of central government as a whole.
- 5.206 The departments of central government are often deliberately dispersed geographically and located in different parts of the country, but they nevertheless remain parts of a single institutional unit. Similarly, if the central government maintains branch offices or agencies in different parts of the country to meet local needs, including military bases or installations that serve national defence purposes, these must also be counted as parts of a single institutional unit for central government.
- 5.207 In addition to government departments and ministries, there may be agencies of central government with separate legal identity and substantial autonomy; they may have discretion over the volume and composition of their expenditures and may have a direct source of revenue such as earmarked ("hypothecated") taxes. Such agencies are often established to carry out specific functions such as road construction or the non-market production of health or education services. These should be treated as separate institutional units if they maintain full sets of accounts but are part of the central government subsector if the services they produce are non-market and if they are controlled by central government.
- 5.208 In some countries, the central government may include units that engage in financial transactions that in other countries would be performed by central banks. In particular, units of central government may be responsible for the issue of currency, the maintenance of international reserves and the operation of exchange stabilization funds, and also transactions with the International Monetary Fund (IMF). When the units in question remain financially integrated with central government and under the direct control and supervision of central government, they cannot be treated as separate institutional units. Moreover, whatever monetary authority functions are carried out by central government are recorded in the government sector and not the financial corporations sector. However, because of the analytical importance that is attached to obtaining accounts covering the monetary authorities

as a whole, and in order to provide links with other statistical systems, such as the BPM, the GFSM and the Monetary and Financial Statistics Manual and Compilation Guide (MSFMCG), it is recommended that the transactions of central government agencies carrying out monetary authority and deposit-taking functions should be separately identified, so that they can be combined with those of the central bank and other deposit-taking corporations in special tabulations if desired.

State government

- 5.209 The state government subsector consists of state governments that are separate institutional units plus those non-market producers that are controlled by state governments.
- 5.210 State governments are institutional units exercising some of the functions of government at a level below that of central government and above that of the governmental institutional units existing at a local level. They are institutional units whose fiscal, legislative and executive authority extends only over the individual “states” into which the country as a whole may be divided. Such “states” may be described by different terms in different countries. In some countries, especially small countries, individual states and state governments may not exist. However, in large countries, especially those that have federal constitutions, considerable powers and responsibilities may be assigned to state governments.
- 5.211 A state government usually has the fiscal authority to levy taxes on institutional units that are resident in, or engage in economic activities or transactions within, its area of competence (but not other areas). In order to be recognized as an institutional unit it must be able to own assets, raise funds and incur liabilities on its own account. It must also be entitled to spend or allocate some, or possibly all, of the taxes or other income that it receives according to its own policies, within the general rules of law of the country, although some of the transfers it receives from central government may be tied to certain specified purposes. It should also be able to appoint its own officers, independently of external administrative control. On the other hand, if a regional unit is entirely dependent on funds from central government, and if the central government also dictates the ways in which those funds are to be spent at the regional level, it should be treated as an agency of central government rather than as a separate institutional unit.
- 5.212 State governments, when they exist, are distinguished by the fact that their fiscal authority extends over the largest geographical areas into which the country as a whole may be divided for political or administrative purposes. In a few countries more than one level of government exists between the central government and the smallest governmental institutional units at a local level; in such cases, for purposes of sectoring within macroeconomic statistics, these intermediate levels of government are grouped together with the level of government, either state or local, with which they are most closely associated.
- 5.213 State governments may own, or control, corporations in the same way as central government. Similarly, they may have units that engage in market production, in which case the relevant producer units should be treated as quasi- corporations whenever their operations and accounting records justify this.

Local government

- 5.214 The local government subsector consists of local governments that are separate institutional units plus those non-market producers that are controlled by local governments. In principle, local government units are institutional units whose fiscal, legislative and executive authority extends over the smallest geographical areas distinguished for administrative and political purposes. The scope of their authority is generally much less than that of central government or state governments, and they may, or may not, be entitled to levy taxes on institutional units resident in their areas. They are often heavily dependent on grants or transfers from higher levels of government, and they may also act as agents of central or regional governments to some extent. However, in order to be treated as institutional units they must be entitled to own assets, raise funds and incur liabilities by borrowing on their own account; similarly, they must have some discretion over how such funds are spent. They should also be able to appoint their own officers, independently of external administrative control. The fact that they may also act as agents of central or state governments to some extent does not prevent them from being treated as separate institutional units provided they are also able to raise and spend some funds on their own initiative and own responsibility.
- 5.215 As they are the government units that are in closest contact with the institutional units resident in their localities, they typically provide a wide range of services to local residents, some of which may be financed out of transfers from higher levels of government. The same rules govern the treatment of the production of goods and services by local government units as are applied to central and state governments. Units such as municipal theatres, museums, swimming pools, etc., that supply goods or services on a market basis should be treated as quasi-corporations whenever the appropriate accounting information is available and classified to the non-financial corporations sector. Other units supplying goods and services on a market basis are treated as unincorporated enterprises within local government. Units supplying services such as education or health on a non-market basis remain an integral part of the local government unit to which they belong.

Social security funds

- 5.216 The social security funds subsector consists of the social security funds operating at all levels of government.

4. THE ALTERNATIVE METHOD OF SUBSECTORING

- 5.217 The alternative method of subsectoring the general government sector is to group the social security funds operating at each level of government with the corresponding government units and government controlled non-market producers at that level of government. The two alternative methods of subsectoring are designed to accommodate different analytical needs. The decision as to which method is more appropriate in a given country cannot be made a priori. It depends on how important social security funds are and on the extent to which they are managed independently of the government units with which they are associated. If the management of social security funds is so closely integrated with the short- or medium-term requirements of the government's general economic policy that contributions and benefits are deliberately adjusted in the interests of overall economic policy, it becomes difficult, at a conceptual level, to draw any clear distinction between the management of social security and the other economic functions of government. Alternatively, in some countries, social security funds may exist in only a very rudimentary form. In either of these circumstances it is difficult to justify treating social security funds as a separate subsector on a par with central, state and

local government, and it is more appropriate to use the alternative method of subsectoring in which they are grouped with the corresponding government units at each level of government.

G. THE HOUSEHOLDS SECTOR AND ITS SUBSECTORS

1. HOUSEHOLDS AS INSTITUTIONAL UNITS

- 5.218 For the purposes of macroeconomic statistics, a household is defined in **paragraph 5.4** as a single person having a separate living accommodation, or a group of persons who share the same living accommodation, who pool some, or all, of their income and wealth and who consume certain types of goods and services collectively, mainly housing and food. In general, each member of a household should have some claim upon the collective resources of the household. At least some decisions affecting consumption or other economic activities must be taken for the household as a whole.
- 5.219 Households often coincide with families, but members of the same household do not necessarily have to belong to the same family so long as there is some sharing of resources and consumption. Households may be of any size and take a wide variety of different forms in different societies or cultures depending on tradition, religion, education, climate, geography, history and other socio-economic factors. The definition of a household that is adopted by survey statisticians familiar with the socio-economic conditions within a given country is likely to approximate closely to the concept of a household as defined in macroeconomic statistics, although **survey** statisticians may add more precise, or operational, criteria within a particular country.
- 5.220 Domestic staff who live on the same premises as their employer do not form part of their employer's household even though they may be provided with accommodation and meals as remuneration in kind. Paid domestic employees have no claim upon the collective resources of their employers' households and the accommodation and food they consume are not included with their employer's consumption. They should therefore be treated as belonging to separate households from their employers.
- 5.221 Persons living permanently in an institution, or who may be expected to reside in an institution for a very long, or indefinite, period of time are treated as belonging to a single institutional household when they have little or no autonomy of action or decision in economic matters. Some examples of persons belonging to institutional households are the following:
- a. Members of religious orders living in monasteries, convents or similar institutions;
 - b. Long-term patients in hospitals, including mental hospitals;
 - c. Prisoners serving long sentences;
 - d. **Persons** living permanently in retirement homes;
 - e. Persons living in labour camps.

- 5.222 On the other hand, persons who enter hospitals, clinics, convalescent homes, religious retreats, or similar institutions for short periods, who attend residential schools, colleges or universities, or who serve short prison sentences should be treated as members of the individual households to which they normally belong.
- 5.223 The residence of individual persons is determined by that of the household of which they form part and not by their place of work. All members of the same household have the same residence as the household itself, even though they may cross borders to work or otherwise spend periods of time abroad. If they work and reside abroad so long that they acquire a centre of economic interest abroad, they cease to be members of their original households. More details on the residence of households are provided in paragraphs 5.253 – 5.267.

2. UNINCORPORATED ENTERPRISES WITHIN HOUSEHOLDS

- 5.224 As noted in the introduction, households are unlike corporations in that they undertake final consumption. However, like corporations, they may also engage in production. Household unincorporated market enterprises are created for the purpose of producing goods or services for sale or barter on the market. They can be engaged in virtually any kind of productive activity: agriculture, mining, manufacturing, construction, retail distribution or the production of other kinds of services. They can range from single persons working as street traders or shoe cleaners with virtually no capital or premises of their own to large manufacturing, construction or service enterprises with many employees.
- 5.225 Household unincorporated market enterprises also include unincorporated partnerships that are engaged in producing goods or services for sale or barter on the market. The partners may belong to different households. When the liability of the partners for the debts of the enterprises is unlimited, the partnerships must be treated as unincorporated enterprises and remain within the household sector since all the assets of the household, including the dwelling itself, are at risk if the enterprise goes bankrupt. However, unincorporated partnerships with many partners, such as some large legal, accounting or architectural firms, are likely to behave like corporations and should be treated as quasi-corporations assuming complete sets of accounts are available for the partnerships. Partnerships whose partners enjoy limited liability are effectively separate legal entities and, as already noted, are treated as corporations.
- 5.226 An unincorporated enterprise can only be treated as a corporation if it is possible to separate all assets, including financial assets down to the level of cash, into those that belong to the household in its capacity as a consumer from those belonging to the household in its capacity as a producer.

3. FAMILY TRUSTS

- 5.227 Households may create trusts for a variety of reasons. Disregarding the issue of a family trust being resident in another country than its beneficiaries, as a consequence of which it would automatically be treated as a separate institutional unit, the standard criteria for an institutional unit should be applied for treating trusts which are resident in the same economy as its beneficiaries. In practice, the trust should be consolidated with the household, if there is a single beneficiary assuming the risks and rewards, while in the case of a trust with multiple beneficiaries, the trust is to be treated as a separate institutional unit, to be classified in

subsector S.127 Captive financial institutions and money lenders assuming that the group of beneficiaries is restricted. More details on the treatment of trusts are provided in paragraphs 5.103 – 5.111.

4. SUBSECTORS OF THE HOUSEHOLD SECTOR


- 5.228 The household sector consists of all resident households. There are many useful ways in which the households sector may be subsectored and statistical agencies are advised to give due consideration to the various possibilities. More than one method may be adopted if there is a demand for different breakdowns of the households sector from different users, analysts or policymakers.
- 5.229 The SNA has to be applied flexibly, not rigidly. In order to implement any of the possible methods of subsectoring the households sector suggested below, individual countries should make their own decisions about what they consider to be the most relevant classification. Thus, the fact that a specific, detailed classification according to a criterion of interest is proposed here should not be interpreted as implying that the characteristics proposed are necessarily or always the most important for purposes of economic analysis and policymaking. Having said that, in view of the importance of having internationally comparable data on the distribution of income, consumption, saving and wealth across household groups, below a subsectoring according to income and wealth deciles is put forward as a standard breakdown, while other breakdowns are considered to be supplementary items, which could be more or less relevant depending on country circumstances.
- 5.230 More generally, when breaking down the households sector into various groups of households, institutional households are typically excluded from the analysis. The main reason for excluding these types of households is that they may comprise large groups of individuals with very different socio-demographic backgrounds, who are not related, and who may have very different income and consumption patterns. As a consequence, they are not really comparable with private households, which is why it is recommended to analyze and present them separately.

Subsectoring according to levels of income and wealth

- 5.231 Households may be grouped into subsectors according to their level of income or their level of wealth. As the size and composition of households differ significantly, ranging from one-person households to households with multiple adults with or without children, the levels of income, consumption and wealth are not directly comparable. Therefore, it is recommended to focus on 'equivalized' results, using equivalence scales that take into account the differences in size and composition of households. In doing so, results for income and consumption are typically recalculated according to the number of consumption units in each household, whereby a value is assigned to each household type in proportion to its needs. As a default, the "modified OECD scale" could be used, which assigns a value of 1 to the first adult household member (14 and above), of 0.5 to each additional household member of 14 and above, and of 0.3 to each additional household member up to 13. However, as the most appropriate scale may depend on specific circumstances, countries may look for other equivalence scales which may be more representative of their national circumstances.

- 5.232 In relation to the analysis of wealth, the use of equivalence scales depends on the purpose of the analysis. They should be avoided when analysing the characteristics of individual components of wealth and the distribution of net wealth. To control for different household structures, complementary analysis can be done on per capita basis. However, for the joint analysis of income, consumption and wealth, it is practical to use the same equivalence scales to adjust wealth as those used to adjust income and consumption. In doing so, wealth is treated as a source of income streams that can be used to finance current consumption and contribute to current economic well-being in the household.
- 5.233 As a standard, breakdowns by standard of living based on (current) disposable income and based on wealth should be targeted, showing income and wealth decile groups, and, if possible, results for the top 5% and the top 1%. Depending on analytical needs, alternative breakdowns as presented below could be compiled, as supplementary items. More details on compiling distributional results are provided in chapter 32.

Subsectoring according to other criteria

- 5.234 Households may also be grouped into subsectors according to the nature of their largest source of income. For this purpose, the following types of household income need to be distinguished:
- a. Income from self-employment;
 - b. (Net) property income;
 - c. Remuneration of employees;
 - d. (Net) current transfers received, to be broken down into pension benefits and other (net) current transfers.
- 5.235 Households are allocated to subsectors according to which of the four categories of income listed above is the largest for the household as a whole, even if it does not always account for more than half of total household income. When more than one income of a given category is received within the same household, for example, because more than one member of the household earns remuneration of employees or because more than one property or transfer income is received, the classification should be based on the total household income within each category.
- 5.236 Another way of grouping households into subsectors is to look at the number and age of the members of the household, as follows:
-  a. Single less than 65 years old;
 - b. Single 65 and older;
 - c. Single with children living at home;

- d. Two adults less than 65 without children living at home;
- e. Two adults at least one 65 or older without children living at home;
- f. Two adults with less than 3 children living at home;
- g. Two adults with at least 3 children living at home; and
- h. Other households.

5.237 Within the above household compositions, children are generally classified as up to 16 years and up to 24 years if they are the offspring of one of the household members and are still living at home. The classification of children may vary between countries dependent on national legislation.

5.238 Alternative classifications could also be considered:

- a. By geographic region;
- b. By housing status (e.g., rental, owner-occupied with mortgage, and owner-occupied without mortgage);
- c. By the age of the reference person (e.g., 0-24, 25-34, 35-44, 45-54, 55-64, 65- 74, and 75+);
- d. By labour market status of the reference person (e.g., unemployed, employee, employer, own account worker, unpaid family worker, member of producer's cooperative, student, retired and not classified by status);
- e. By highest level of educational attainment of the reference person (e.g., low, middle and high);
- f. By disability status of the reference person;
- g. By migratory status of the reference person;
- h. By ethnicity of the reference person;
- i. By degree of urbanisation; and
- j. By sex or gender of the reference person.

5.239 Cross-sections of the groupings as listed above with the subsectors according to the level of income and wealth may also be possible, such as further breaking down labour market status groups by income decile, or by looking at the income distribution within regions. This may

provide more detailed insights in inequalities within specific subgroups. However, it is important to assess the quality of the results at these more granular levels of detail. In this respect, more detailed insights in household groups may also be obtained by combining the distributional results based on the level of income and wealth with socio-demographic information, focusing on specific socio-demographic characteristics of households or individuals belonging to the various household groups.

H. THE NON-PROFIT INSTITUTIONS SERVING HOUSEHOLDS SECTOR

- 5.240 Previous sections have explained that NPIs are allocated to the corporations sectors when they are engaged in market production and to the general government sector if they are engaged in non-market production but subject to government control. The remaining NPIs are termed non-profit institutions serving households (NPISHs). All provide goods and services free or at prices that are not economically significant.
- 5.241 One type of NPISHs consists of those that are created by associations of persons to provide goods or, more often, services primarily for the benefit of the members themselves. The services are usually provided free, being financed by regular membership subscriptions or dues. They include NPISHs such as professional or learned societies, political parties, trades unions, consumers' associations, churches or religious societies, and social, cultural, recreational or sports clubs. They do not include bodies serving similar functions that are controlled by government units. Religious institutions are treated as NPISHs even when mainly financed by government units if this majority financing is not seen as empowering control by government. Political parties in countries with one-party political systems that are controlled by government units by means of providing the necessary finance are included in the general government sector.
- 5.242 In some communities, NPISHs may be found that do not possess any legal status or formal articles of association. They should be treated as NPISHs when they perform the same kinds of functions as the societies, political parties, trades unions, etc., described above, even if they are not legally constituted as NPISHs. However, when groups of households collaborate on communal construction projects (such as construction of buildings, roads, bridges, ditches, dykes, etc.), they should be treated as informal partnerships engaged on own-account construction rather than NPISHs. NPISHs should normally have a continuing role to play and not be deemed to be created for single projects of limited duration.
- 5.243 A second type of NPISH consists of charities, relief or aid agencies that are created for philanthropic purposes and not to serve the interests of the members of the association controlling the NPISH. Such NPISHs provide goods or services on a non-market basis to households in need, including households affected by natural disasters or war. The resources of such NPISHs are provided mainly by donations in cash or in kind from the general public, corporations or governments. They may also be provided by transfers from non-residents, including similar kinds of NPISHs resident in other countries.
- 5.244 The third type of NPISHs consist of those that provide collective services, such as research institutions that make their results freely available, environmental groups, etc. These are less common than the first two types of NPISHs and may not always be significantly represented in a country.

- 5.245 If the number or size of NPISHs funded from abroad is significant, it may be useful to disaggregate NPISHs into those that are mainly funded domestically and those that are mainly funded from abroad.

I. THE REST OF THE WORLD

- 5.246 For purposes of macroeconomic statistics, the rest of the world consists of all non-resident institutional units that enter into transactions with resident units, or have other economic links with resident units. It is not a sector for which complete sets of accounts have to be compiled, although it is often convenient to describe the rest of the world as if it were a sector. The accounts, or tables, for the rest of the world are confined to those that record transactions between residents and non-residents or other economic relationships, such as claims by residents on non-residents, and vice versa. The rest of the world includes certain institutional units that may be physically located within the geographic boundary of a country; for example, foreign enclaves such as embassies, consulates or military bases, and also international organizations.

1. INTERNATIONAL ORGANIZATIONS

- 5.247 Certain international organizations have all the essential attributes of institutional units. The special characteristics of an “international organization” as this term is used in macroeconomic statistics may be summarized as follows:

- a. The members of an international organization are either national states or other international organizations whose members are national states; they thus derive their authority either directly from the national states that are their members or indirectly from them through other international organizations;
- b. They are entities established by formal political agreements between their members that have the status of international treaties; their existence is recognized by law in their member countries;
- c. International organizations are created for various purposes:
 -
 - International financial organizations – these entities conduct financial intermediation at an international level (i.e., channelling funds between lenders and borrowers in different economies). A central bank to a group of economies (including currency union central banks) is an example of an international financial organization. Other examples are the IMF, World Bank Group, BIS, and regional development banks; and
 -
 - Other international organizations – these entities provide non-market services of a collective nature for the benefit of their member states, such as peacekeeping, education, science, policy issues, and other research.

- 5.248 International organizations may be global or regional. An international agency responsible for functions normally undertaken by general government, such as administration and policing, is

classified as an international organization, but it may be useful to identify such agencies separately in statistics.

- 5.249 International organizations are treated as not being resident of the territories in which they are located. This treatment is because they are generally exempted from, or are only partially subject to, national laws or regulations, and so they are not considered to be part of the national economy of the territory, or territories, in which they are located.
- 5.250 International organizations may be presented as an institutional sector in some cases. First, they may appear in data for a currency union or economic union, in which case, international organizations of the union are residents of the union as a whole. Second, they may be of relevance when data by sector of counterparty are prepared, for example, for sources of current transfers. Such data would be of particular interest in economies in which international organizations have a substantial presence.
- 5.251 In contrast to international organizations, enterprises owned jointly by two or more governments are not treated as international organizations but like other enterprises. In the case of joint zones under the control of two or more governments, the enterprises in the zone are split between governments based on some operational indicator or equal proportions (see paragraph 5.253). The distinction is based on whether the organization produces for the market and is important because of the different treatments for the residence of international organizations and enterprises. Separate pension funds for the staff of international organizations are treated as pension funds, rather than as international organizations. Therefore, the residence of these pension funds is determined according the general principle for determining residency.

2. CURRENCY UNIONS AND CURRENCY UNION CENTRAL BANKS

- 5.252 A currency union is defined as a union to which two or more economies belong and that has a regional central decision-making body, commonly a currency union central bank (CUCB), endowed with the legal authority to conduct a single monetary policy and issue the single currency of the union.
- 5.253 A distinction can be made between centralized currency unions and decentralized currency unions. In the former model, the currency union has a CUCB owned by the governments of the member economies with the common currency issued by the CUCB and central bank operations in each economy carried out by branches or agencies of the CUCB. In the latter model, the currency union comprises a CUCB and currency union national central banks (CUNCBs) of the member economies with the CUCB being owned by the CUNCBs. The monetary policy decisions are taken by the decision-making body of the CUCB, which also coordinates the implementation of the decisions, a primary responsibility of the CUNCBs.
- 5.254 The central bank of a currency union is treated as a special kind of international organization. The members of the international organization of which the central bank is part are the governments or the national central banks of the countries in the currency union. The central bank is treated as being non-resident in any of the member countries of the currency union but is resident in the currency area as a whole. More on the treatment of currency and economic unions can be found in appendix 3 of *BPM7*.

- 5.255 In relation to the treatment of centralized currency unions, national agencies, including the notional resident units, are treated as residents of the economies of their location. Transactions between the national agency and resident units of the same member economy settled through accounts at the currency union central bank will thus be recorded/imputed in the balance sheets of the national agency for statistical purposes, and treated as transactions and positions between residents. This ensures that in each economy, monetary activities with residents of the currency union are carried out by national agencies (which resemble in its operations a national central bank) having their own assets and liabilities.

J. SPECIAL ISSUES ASSOCIATED WITH ECONOMIC TERRITORY AND RESIDENCE

- 5.256 This section starts with providing slightly more detailed guidance on the concept of economic territory. Subsequently, the concept of residence is further elaborated for households and individuals, for enterprises and various types of production arrangements, and for government units, (regional) international organizations and NPISHs. The section ends with a discussion of the treatment of assets and liabilities held by groups of residents and non-residents, the treatment of changes in residence of institutional units, and finally, alternatives to the residence concept.

1. MORE DETAILS ON THE ECONOMIC TERRITORY

International organizations

- 5.257 The economic territory of an international organization (defined in paragraphs 5.239 – 5.243) consists of territorial enclave(s) over which the organization has jurisdiction. These enclaves are clearly demarcated land areas or structures that the international organization owns or rents and uses, and that are formally agreed on with the government of the territory, or territories, in which the enclave(s) are physically located. Each international organization is an economic territory in its own right, covering operations from all its locations. As a consequence, the economic territory of international organizations is not included in the scope of a country's macroeconomic statistics.

Special zones

- 5.258 Sometimes a government has a separate physical or legal zone that is under its control, but to which, to some degree, separate laws are applied. For example, a free trade zone or offshore financial centre (i.e., a jurisdiction in which financial corporations located there predominantly have financial transactions and positions with clients outside that jurisdiction) may be exempt from certain taxation or other laws. Because of the need to view the whole economy, to have comprehensive global data, and to be compatible with partner data, these special zones always should be included in the economic statistics of that economy. While national totals showing all economic activities in the economy are required for international purposes, separate data may be prepared for different subsets of the economy. To the extent that different laws and policies may apply, and persons, goods, and finance do not flow completely freely between a zone and the rest of the economy, a government may wish to have data to support separate analysis of either or both the special zone and the remainder of the economy.

Changes in economic territory

- 5.259 The scope of an economic territory may change under several circumstances:
- a. The passing of control of a geographic area from one government to another by mutual agreement or under a decision of an international court or arbitrator. These exchanges satisfy the definition of a transaction. Accordingly, assets conveyed from one government to the other are recorded as an acquisition of land (in the external accounts recorded in the capital account) or equipment and buildings (in the external accounts recorded as transactions in goods and services, respectively, if they can be separated). If the exchange is made in exchange for payment or extinguishing of a prior liability, the corresponding entry is a financial account entry for the agreed amount. If there is no amount payable, the corresponding entry is a capital transfer. If there is a mutual exchange of land or buildings, both entries in the exchange are shown on a gross basis. In addition to these cases involving the two governments, the exchange of territory could change the territory of residence of other institutional units. As with other changes in residence, these would result in other changes in the volume of assets and liabilities.
 - b. Change in the status of a particular area by seizure. Because this change in status is not by mutual agreement, it is not a transaction, but would instead be reflected by entries in the other changes in volume account.
 - c. The merger of two or more economic territories to have a single national government may be seen as an absorption of one territory by another or the elimination of two territories and the creation of another. These arrangements result in entries in the other changes in volume account (namely, elimination of cross-border liabilities between the two previous constituent territories and possible reclassifications for economies having asset or liability positions with either territory).
 - d. The split of a single economic territory into two or more territories is not in itself a transaction. However, there may be associated flows between the parties, for example, compensation for assuming liabilities that would qualify as transactions and be classified according to usual definitions. There also would be entries in the other changes in volume account for the appearance of cross-border liabilities between the two separating economies.
- 5.260 When such events occur, it is essential that metadata are provided to assist users in understanding how the territorial changes affect the data.

Joint zones

- 5.261 In some cases, areas are under joint administration or sovereignty, that is, an area is under the effective economic control of two or more governments. These areas can be called joint administration or sovereignty zones. Because, typically, they have laws that differ from the primary territories of the individual governments, the zone could be considered an economic territory in its own right. Because the number of enterprises in these zones typically is small, however, it may be preferred to split the enterprises in the zone between the primary territories rather than publish separate data for the zone. The method of splitting should be to prorate on the basis of a relevant factor according to the circumstances, such as some operational indicator or equal proportions for each of the primary territories. This general guidance needs to be applied appropriately to the economic circumstances faced. For instance, when the

enterprises that account for the vast majority, or all, of the economic activity in the zone are effectively operated from the economy of just one of the sovereign authorities, it may be preferred to treat those enterprises as residents of that economy, showing the other economy as recipient of its share of property income, taxes, and so on, and avoiding most of the complexities of prorating for those enterprises. The statistical compilers of each primary territory involved should consult with each other to adopt consistent methods with no gaps or overlaps. Through metadata and consultations, they may also assist compilers in counterpart economies to ensure consistency of bilateral data.

2. MORE DETAILS ON RESIDENCE

Residence of households


- 5.262 Although many people are clearly strongly connected to only one economy, others have substantial economic interests in two or more economic territories. Factors such as location of dwellings, employment, asset holdings, citizenship, migration status, income tax status, income received, expenditure, business interests, and location of dependent family members may point to different economies. To identify the economy of residence when there are connections to two or more economies, the following definition is used to identify the centre of predominant economic interest.
- 5.263 A household is resident in the economic territory in which household members maintain or intend to maintain a dwelling or succession of dwellings treated and used by members of the household as their principal dwelling. **Any unincorporated enterprise of such a household** is also resident in this economic territory. Being present for one year or more in a territory or intending to do so is sufficient to qualify as having a principal dwelling there. If there is uncertainty about which dwelling is the principal dwelling, it is identified from the length of time spent there, rather than other factors such as presence of other family members, cost, size, or length of tenure.
- 5.264 Individuals who belong to the same household must be residents of the same territory. If a member of an existing household ceases to reside in the territory where his or her household is resident, the individual ceases to be a member of that household. As a result of this definition, the use of households as the institutional unit is compatible with residence being determined on an individual basis.
- 5.265 Further to the general principles, some other factors are used to determine residence of particular categories. These categories are students, medical patients, ship's crew, as well as national diplomats, military personnel, staff of scientific stations, and other civil servants employed abroad in government enclaves (these enclaves are discussed in **paragraph 5.14**). In these cases, some other connections are considered to be more important in determining residence. In the case of significant population movements between two particular territories, compilers in each territory should cooperate to ensure consistent definitions and measurement.

Students

- 5.266 People who go abroad for full-time study generally continue to be resident in the territory in which they were resident prior to studying abroad. This treatment is adopted even though their course of study may exceed a year. However, students change to being residents of the territory in which they are studying when they develop an intention to continue their presence

in the territory of study after the completion of the studies. For students, the rationale for not changing the territory of residence is that the movement to a different territory is considered to have a temporary motivation, that is, their centre of predominant economic interest remains with the home territory. The residence of accompanying dependents of students is determined in the same manner as the persons they accompany. From the perspective of their resident economy, the tuition and other expenditure of students and accompanying persons in their host economies are included in import of services (in BPM classified under travel—see paragraph 11.xx, *BPM7* for specific details).

Patients

- 5.267  People who go abroad for the purpose of medical treatment maintain their predominant centre of interest in the territory in which they were resident before they received the treatment, even in the rare cases in which complex treatments take a year or more. As with students, the movement is considered to have a temporary motivation. The residence of accompanying dependents of patients is determined in the same manner as the persons they accompany. From the perspective of their resident economy, the expenditures of patients and accompanying persons in their host economies are included in import of services (in BPM classified under travel— see paragraph 11.xx, *BPM7* for specific details).

Crew of ships and so on

- 5.268 Crew of ships, aircraft, oil rigs, space stations, or other similar equipment that operate outside a territory or across several territories are treated as being resident in their home base territory. The home base is determined from where they spend most time other than undertaking their duties. The home base is regarded as a stronger connection than the location of the mobile equipment or its operator, even though most of the time may be spent at the latter location. From the perspective of their resident economy, the expenditures of the crew members in their host economies are included in import of services (in BPM classified under travel).

Diplomats, military personnel, and so on

- 5.269 National diplomats, peacekeeping and other military personnel, and other civil servants employed abroad in government enclaves, as well as members of their households are considered to be residents of the economic territory of the employing government. Those enclaves – military bases, embassies, and the like, as discussed in [paragraph 5.14](#) – form part of the economic territory of the employing government. They continue to be residents in their home economies even if they live in dwellings outside the enclaves. The expenditure of diplomats and so on, including that of their households, in their host economies is included in imports of goods and services (in BPM classified under government goods and services n.i.e.). Other employees, such as locally recruited staff, are resident in the location of their principal dwelling.

International organization staff

- 5.270 Staff of international organizations, including those with diplomatic status and military personnel, are resident in the territory of their principal dwelling. The treatment of international organization staff is different from national diplomats and others discussed in the previous

paragraph because the latter continue to be paid from and directed by their home government and tend to have shorter postings and rotate back to their economy of origin.

Cross-border workers

- 5.271 Border workers, seasonal workers, and other short-term workers cross borders for a certain period to undertake a job. No special treatment is adopted, so their residence is determined according to the criteria in paragraph 5.254. Border workers are employed persons who cross from one territory to another to attend their place of employment. Seasonal workers cross the border for particular periods, such as the harvest or tourist seasons to attend a place of employment. Other short-term employment may occur for a particular task, such as a construction project, repairs, delivery of advice, and so on. In each case, the residence of the persons concerned is based on the principal dwelling, rather than the territory of employment.

Highly mobile individuals

Some individuals have close connections with two or more territories, for example, they have dwellings in more than one territory in which they spend significant amounts of time. For individuals who do not have continuous actual or intended presence in any one territory for one year, the territory of the principal dwelling they maintain is the key consideration. In cases of no principal dwelling, or two or more principal dwellings in different economies, the territory of residence is determined on the basis of the territory in which the predominant amount of time is spent in the year. Although these individuals need to be classified as residents of a single economy for statistical purposes, additional information may be needed in recognition of strong ties to another economy. The statistical result of classifying long-term guest workers as residents of the host economy is appropriate, however, in that their income and consumption in the host territory are not treated as international transactions, only the amounts actually sent to the home economy are.

- 5.272 Nevertheless, it may be desirable for compilers to provide supplementary data on groups of non-residents that have significant links with the economy, for example, by remitting funds to family members remaining there or by intending to return there with savings or pension entitlements. Similarly, it may be desirable to have supplementary data on those who are classified as residents of the economy, but maintain significant links to other economies. Annex 4 discusses some supplementary presentations for flows primarily associated with some of these mobile individuals.

Refugees

- 5.273 No special treatment is adopted for refugees and they are recorded according to the same principles as migrants, although their motivation is usually different. Their residence will change from their home territory to the territory of refuge, if they have stayed or intend to stay in their place of refuge for one year or more, even if that residence is involuntary or transient, and its future status is unclear. The awarding of special rights and protection to refugees for at least one year could be taken into account to assess their intended duration of stay in the territory of refuge.

Application of residence principles

- 5.274 In practice, residence principles are generally not applied to specific individuals, but to broad groups of people. As a result, factors such as intention to stay for one year or more are typically inferred from patterns of similar groups in the past. Some administrative data sources may vary somewhat from statistical definitions of residence. If the variations are significant, some adjustment may be made, or the administrative definition may be considered as an acceptable approximation in practice.
- 5.275 The determination of residence results in how the income, expenditure, and financial positions of the households concerned are treated in macroeconomic statistics. Table 4.3 provides a brief summary of some of the implications for the external accounts of whether a household is classified as resident or non-resident of the reporting economy for different types of flows. For example, a non-resident student studying in a territory is shown as being a source of service credits for education, housing, food, other goods and services, and possibly transfer debits, if the student is receiving a scholarship from the host economy. For a resident student, these transactions would be out of scope of the external accounts. The effect of changes of residence of persons is discussed in [paragraph 5.284](#).

Table 4.3 (*BPM7*): Selected effects of a household’s residence status on the statistics of the host economy (*BPM7*) (= Table 4.3 of *BPM6*)

| Economic flow or position | Resident (e.g., long-term guest worker) | Nonresident (e.g., short-term guest worker) |
|---|---|---|
| Remuneration of employees received from enterprises in the reporting economy | Not external transaction | Earned income |
| Social contributions and taxes on wages and salaries paid by employees in the reporting economy | Not external transaction | Transfer income |
| Personal expenditure in the reporting economy | Not external transaction | Services, mainly travel |
| Transfers to relatives in home economy | Current or capital transfers | Resident-resident transfer within home economy, so outside balance of payments (however, possible financial account transactions if made from bank in host economy) |
| A resident institutional unit’s financial claims on or liabilities to the household | Not in external accounts | Included in external accounts |
| Land and buildings in host economy | Not included in international investment position | Direct investment liability of the reporting economy in notional resident unit |
| Land and buildings in home economy | Direct investment asset in notional resident unit | Not included in international investment position |

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Residence of enterprises

- 5.276 As a general principle, an enterprise is resident in an economic territory when the enterprise is engaged in a significant amount of production of goods or services from a location in the territory. Additional principles are spelled out in paragraphs 5.271 – 5.273. As stated in paragraph 6.1, an enterprise is an institutional unit engaged in production and may be a corporation or quasi-corporation, a non-profit institution, or an unincorporated enterprise (part of household sector).
- 5.277 In contrast to individuals and households, which may have connections to two or more economies, enterprises are almost always connected to a single economy. Taxation and other legal requirements tend to result in the use of a separate legal entity for operations in each legal jurisdiction. In addition, a separate institutional unit is identified for statistical purposes in cases in which a single legal entity has substantial operations in two or more territories (e.g., for branches, land ownership, and multiterritory enterprises, as further elaborated in paragraphs 5.72 – 5.75.). As a result of splitting such legal entities, the residence of each of the subsequently identified enterprises is clear. The introduction of the terminology “centre of predominant economic interest” does not mean that entities with substantial operations in two or more territories no longer need to be split.
- 5.278 It is generally required that production take place or is planned to take place in the territory over a period of a year or more for a quasi-corporation to be identified. All enterprises must be resident somewhere, however, so if an actual institutional unit’s only activity is a production process that is undertaken over a shorter period, the unit is resident in the territory of location of the production.

Corporations with little or no physical presence

- 5.279 A legal entity is resident in the economic territory under whose laws the entity is incorporated or registered. If it is a resident artificial subsidiary, it is combined with a parent resident in the same economy to form an institutional unit or, for some purposes, combined into a local enterprise group. However, it must not be combined with entities resident in other economies. If it has substantial operations in another economy, a branch may be identified there (see paragraph 5.18 (c)). In some cases, a corporation has little or no physical presence, for example, its administration is entirely contracted out to other entities. Banking, insurance, investment funds (as distinct from their managers), securitization vehicles, and some other institutional units with similar designations often operate this way. Similarly, with virtual manufacturing, all the physical processes are outsourced to other units.
- 5.280 A single corporation might be registered in several jurisdictions, for example, incorporation, income tax, value added tax, and particular regulations, and a jurisdiction may have been agreed on for settling disputes involving the enterprise. In such cases, the jurisdiction of the laws that govern the creation and continued existence of the entity should be used as the criterion for determining residence. If there is no incorporation or registration, legal domicile is used as a criterion. The incorporation and registration represent a substantial degree of connection to the economy, associated with jurisdiction over the enterprise’s existence and operations. In contrast, other connections such as ownership, location of assets, or location of managers or administration may be less clear-cut.

Production delivered from a base

- 5.281 In some cases, an enterprise has a location that is used as a base to deliver services to other locations. For example, this mode is used for transport and also may be used for delivery of many kinds of services, such as on-site repairs, short-term construction, and many types of business services. In such cases, the residence of the enterprise is determined from its base of operations, rather than the point of delivery or location of mobile equipment, unless the activities at the point of delivery are sufficiently substantial to amount to a branch, as discussed in paragraphs 5.57 – 5.59. For example, an institutional unit that operates ships on the high seas and various territorial waters has its residence determined according to the criteria in paragraphs 5.267 – 5.272, and the economy of residence is not necessarily the same as the location where the ships spend the most time or the territory of registration of the ships. Additionally, the enterprise that operates the ships is not necessarily the same as the enterprise that owns the ships, such as where the ship operator has an operating lease from the ship owner, who is resident in another economy. The residence of the enterprise that owns the ship is also determined according to the criteria in paragraphs 5.268 – 5.272. Flags of convenience used by enterprises do not determine the residence of the operator, and indeed a single shipping operator may have ships registered in several economies. Similarly, the residence of enterprises that charter ships is determined by the location of its own base of operations, rather than the flags or locations of particular ships. The base of operations does not necessarily equate to the location from which the enterprise is managed. A company operating mobile equipment may be legally domiciled in one economy but managed from another economy.
- 5.282 Table 4.4 provides a brief summary of some of the implications for the external accounts of whether an enterprise is treated as a resident enterprise or as a nonresident for different types of flows and positions. The possibility of change of residence by enterprises is discussed in paragraph 4.167.

| Table 4.4 (<i>BPM7</i>): Selected effects of the residence status of an enterprise owned by a nonresident on the statistics of the host economy (<i>BPM7</i>) (= Table 4.4 of <i>BPM6</i>) | | |
|---|---|---|
| Economic flow or position | Resident enterprise (e.g., long-term construction project) | Nonresident enterprise (e.g., short-term construction project) |
| Sales by enterprise to residents | Not external transaction | Imports of goods and services |
| Purchases by enterprise from residents | Not external transaction | Exports of goods and services |
| Remuneration of employees payable to residents of host economy | Not external transaction if receivable | Remuneration of employees |
| Remuneration of employees payable to residents of home economy | Remuneration of employees | Not transaction of host economy |
| Net operating surplus | Dividends payable or reinvested earnings (enterprise is a direct investment enterprise) | Not external transaction |
| Injections of funds by owners | Direct investment liabilities of the reporting economy (enterprise is a direct investment enterprise) | Not external transaction |
| A resident institutional unit's financial claims on or liabilities to the enterprise | Not included in external accounts | Included in external accounts |

Residence of other institutional units

General government

- 5.283 General government includes operations outside the home territory, such as embassies, consulates, military bases, and other enclaves of foreign governments, including those providing training and other forms of assistance. Usually, these operations are not separate institutional units, but even if they were, they are residents of their home territory, rather than the host territory in which they are physically located. This treatment is adopted because they usually have some degree of immunity from the host territory's laws and are deemed under international law to be extensions of the home government's territory. However, an entity created by a government under the laws of the host jurisdiction is an enterprise resident in the host economy and not part of the general government sector in either economy. The residence of the employees of these operations is discussed in [paragraph 5.259](#).

International organizations

- 5.284 International organizations are defined in [paragraphs 5.239 – 5.243](#). International organizations are resident in an economic territory of their own, and not of the economy in which they are physically located. This treatment applies to both international organizations located in only one territory and those located in two or more territories. The residence of the employees of these operations is discussed in [paragraph 5.261](#).

- 5.285 An international organization that operates peacekeeping and other military forces or that acts as the interim administration in a territory remains classified as an international organization and is non-resident in that territory, even if it undertakes general government functions. In cases in which these organizations are significant, it may be desirable to identify them separately.
- 5.286 A separately constituted pension fund of an international organization is not treated as an international organization, but it is regarded as a financial corporation. Its residence is determined according to the general principles in paragraphs 5.268 – 5.272 – that is, it is a resident of the territory in which it is located, and if it lacks a physical presence, it is a resident of the economy in which it is incorporated or registered.

Regional international organizations

- 5.287 Some international organizations cover a group of economies in a particular region, such as with economic or currency unions. If statistics are prepared for that region as a whole, these regional organizations are residents of the region as a whole, even though they are not residents of any member economy.
- 5.288 When producing global or regional totals, international organizations are combined with national data.

NPISHs

- 5.289 An NPISH has a centre of economic interest in the economy in which the institution was legally created and is officially recognized and recorded as a legal or social entity. In practice, residence of the vast majority of NPISHs may be determined without ambiguity. When an NPISH is engaged in charity or relief work on an international scale, it may maintain substantial operations for individual territories that may amount to branches (see discussion in paragraph 5.57 – 5.59). Such a branch is usually financed largely or entirely by current or capital transfers from abroad. NPISHs are not international organizations, which are limited to those created by governments.

3. ASSETS AND LIABILITIES HELD BY GROUPS THAT INCLUDE BOTH RESIDENTS AND NON-RESIDENTS

- 5.290 Some financial assets have owners who are residents of different economic territories. Examples include joint bank accounts or other cases in which an account holder authorizes relatives to withdraw funds from the account. In these cases, the allocation between the owners may be unclear:
- In the case of deposits of emigrant workers in their home economies that are freely usable by family members resident in the home economies, a convention can be adopted to treat these assets as being held by residents of the home economy.

- Similarly, for deposits of emigrant workers in the host economy that are freely usable by family members, a convention can be adopted to treat these as being held by a resident of the host economy.

5.291 Compilers may adopt another treatment if better information is available. Because these accounts may be used to make transfers, it is important that such transactions are recognized at either the time of deposit or time of withdrawal (depending on the convention adopted). It is also important that compilers discuss methods with the compilers of monetary and financial statistics and compilers in the counterpart economy with a view to adopting consistent and realistic treatments in cases in which the values are significant.

4. CHANGES IN RESIDENCE OF INSTITUTIONAL UNITS

Change in residence of individuals

5.292 Households or their individual members can change their territory of residence. Because all members of a household are residents of the same territory, the movement of an individual may require that the person leave one household and become a member of another household. The change in the residence by an owner of an asset or by someone who has a liability requires a reclassification, because no exchange is made between two parties and, accordingly, no transaction occurs. (The entries are discussed in paragraphs 9.21–9.22.)

Assets moved between entities

5.293 For what are called “corporate migrations”, two situations can occur: one in which assets are moved between entities and another in which the corporation itself changes residence. When a company is said to relocate to another jurisdiction, it usually involves transactions to move assets from a corporation in one economy to a related corporation in a different economy (see paragraphs 8.19 – 8.22, “corporate inversion and other restructuring”). That is, the ownership of assets is moved, rather than the entity changing residence.

Change in residence of entities other than persons

5.294 In contrast, in some rare cases, an entity changes its residence (i.e., without moving assets to ownership by another entity). These cases could arise from exchanges of territory between governments. Additionally, corporation or trust law in some cases allows entity emigration or immigration (e.g., it could be permitted within an economic union, but is not generally the case for most jurisdictions). The effects on the IIP would be treated as other changes in volume in the same way as for the change in residence of an individual, recorded in the other changes in financial assets and liabilities account. (These cases are discussed in paragraph 9.23.)

5. ALTERNATIVES TO THE RESIDENCE CONCEPT

5.295 With globalization, an increasing number of entities have connections to two or more economies. Some additional data sets provide alternatives to the residence concept, such as those based on ownership (as in data on the activities of multinational enterprise groups, as

discussed in [Appendix 4](#), and consolidated banking statistics) and provide additional information, such as on resident workers who send remittances abroad (as discussed in [Appendix 5](#)). In consolidated banking statistics, banking groups and their global operations are reported as a single entity (i.e., all the controlled affiliates of an enterprise are allocated to the economy of the head office).



Chapter 5. Classifications of Financial Assets and Liabilities

Chapter 5 Classifications of Financial Assets and Liabilities

5.1 This chapter discusses the classifications of financial assets and liabilities used in the international accounts. These classifications are applied to positions, the associated income, financial account transactions, and other changes involving financial assets and liabilities. Classifications are used to group similar components and to separate components with different characteristics. The international accounts functional categories and their relationship to the instruments classification are discussed in Chapter 6. [A discussion of Islamic finance in the context of the national accounts and the external sector statistics, including Islamic banking instruments and the classification of financial assets and liabilities and a discussion of economic ownership in the case of Islamic finance, can be found in Chapter 17, Islamic Finance.](#)

A. Definitions of Economic Assets and Liabilities

References:

2025 SNA, Chapter 12, The Financial Account, and Chapter 14, The Balance Sheet.

IMF, *MFSM 2000*, Chapter 4, Classification of Financial Assets.

IMF, *Monetary and Financial Statistics Compilation Guide*, 2008.

IMF, *Financial Soundness Indicators: Compilation Guide*, 2006, Appendix IV, Reconciliation Between the Guide's Methodology and National and Commercial Accounting.

BIS, ECB, and IMF, *Handbook on Securities Statistics*, 2015.

To be updated. Include a reference to Annex 10 on green bonds and Chapter 17 on Islamic Finance instruments.

1. Economic assets in general

5.2 *Economic assets are resources over which ownership rights are enforced and may entitle the owner to economic benefits.* They include fixed assets, such as equipment and intellectual property, that are used repeatedly or continuously in production over more than one year. They also include inventories, valuables, nonproduced nonfinancial assets, and financial assets.

5.3 Every economic asset has an owner. *The economic owner of the asset is the party who bears the risks and receives the benefits of ownership.* Benefits of ownership usually include the right to use, rent out, or otherwise generate income, or to sell the asset. The risks include the potential losses caused by damage, theft, and holding losses; that management, transfer, or maintenance costs are greater than anticipated; and, in the case of financial assets, default of the counterparty. Ownership may be subject to costs such as maintenance costs and taxes. Usually, the economic owner is the same as the legal owner,¹ but they may differ in cases such as financial leases. Under some legal arrangements, elements of the risks and benefits are split between different parties, so it is necessary to identify which party has the bulk of risks and benefits to identify the economic ownership. Every economic asset has demonstrable

¹ Entity entitled in law and sustainable under the law to claim the benefits associated with goods, services, natural resources, financial assets or liabilities (which may be different from the economic owner).

value, functioning as a store of value that reflects the amounts of the economic benefits that its owner can derive by holding it, using it, or providing it temporarily to another entity. It may be tangible or intangible.

Different kinds of economic benefits that may be derived from an asset include:

- (a) the ability to use assets, such as buildings or machinery, in production;
- (b) the generation of services, for example, renting out produced assets to another entity;
- (c) the generation of property income (e.g., interest and dividends received by the owners of financial assets); and
- (d) the potential to sell and thus realize holding gains.

5.4 The classification system of economic assets recognized in macroeconomic data sets is shown in Table 5.1. In the international accounts, produced assets are covered in the goods and services account, nonproduced nonfinancial assets in the capital account, and financial assets and liabilities in the financial account and IIP. This chapter deals with the classification of financial assets and liabilities.

| Table 5.1. Economic Asset Classification <i>(Includes 2025 SNA codes)</i> | |
|---|---|
| Asset classes | Examples |
| An nonfinancial assets | |
| An1 produced assets | |
| An11 fixed assets | Tangible assets: dwellings; other buildings and structures; machinery and equipment; weapons systems; cultivated biological resources. Intangible assets: research and development; mineral exploration; computer software and databases; entertainment, literary, and artistic originals. |
| An12 inventories | Materials and supplies, work-in-progress, finished goods, goods for resale. |
| An13 valuables | Precious metals and stones, antiques, and other art objects. |
| An2 nonproduced assets | |
| An21 natural resources | Land and subsoil assets, noncultivated biological resources, water resources, radio spectra. |
| An22 contracts, leases, and licenses | Marketable operating leases, permissions to use natural resources, permissions to undertake specific activities, entitlement to future goods and services on an exclusive basis. |
| An23 Goodwill and marketing assets | Brand names, mastheads, trademarks. |
| AF financial assets | see Table 5.3 |

2. Financial instruments



5.5 *Financial instruments consist of the full range of financial contracts made between institutional units.* They may be recorded on the balance sheet or off the balance sheet (e.g., constructive and contingent assets and liabilities). Financial

instruments may give rise to financial claims (as discussed in paragraph 5.6) or not (as discussed in paragraphs 5.9-5.14).

3. Financial claims

5.6 *A financial claim is a financial instrument that gives rise to an economic asset that has a counterpart liability, including shares and other equity in corporations.*

Financial claims arise from contractual relationships established when one institutional unit promises to provide funds or other resources to another in the future. (Usually, funds or resources are supplied at the beginning of the relationship, but not in the case of forwards contracts in financial derivatives.) Equity is also regarded as a financial claim as it represents property rights on an entity and a claim of the owner on its residual value.

5.7 Each financial claim is a financial asset that has a corresponding liability. A liability (and a corresponding asset) is established when one unit (the debtor) is obliged, under specific circumstances, to provide funds or other resources to another unit (the creditor). The existence of two parties to a financial claim and its corresponding liability means that it can arise in a cross-border situation.

5.8 Nonfinancial assets do not have a corresponding liability. For example, fixed assets, commodities, and certain types of crypto assets do not have a corresponding liability.

5.XX Certain financial instruments (e.g., unallocated gold deposits, commodity futures, commodity-linked bonds) which are linked to the price of commodities or other nonfinancial assets (e.g., oil, gas, agricultural products, gold, silver, copper, platinum) are also financial claims to the extent that they give rise to an economic asset with a counterpart liability.

4. Financial assets

5.9 Financial assets consist of financial claims and the gold bullion held by monetary authorities as a reserve asset. Financial assets consist of equity and investment fund shares, debt instruments, financial derivatives and employee stock options, and monetary gold (see Table 5.3). Financial assets include crypto assets with a corresponding liability. They should be recorded in relevant financial assets and liabilities (see Chapter 16.XX for discussions on crypto assets). Financial assets can be delineated from financial instruments in that:

- (a) some financial instruments do not give rise to financial assets, as discussed in paragraphs 5.10–5.14. Examples of instruments not recognized as assets are one-off guarantees not yet activated and unrealized commitments such as lines of credit, loan commitments, and letters of credit; and
- (b) when held as monetary gold, gold bullion is a financial asset that is not created by an instrument and that does not represent a claim on another entity. It is considered to be a financial asset because of its role as a means of international payments and store of value for use in reserve assets. (The unallocated gold account component of monetary gold does have a counterpart claim; it is discussed in paragraph 5.74.)

5. Other financial instruments not recognized as financial assets

5.10 Some assets or liabilities may involve a legal contract but specify that one institutional unit is obliged to provide a payment or series of payments or to provide other objects of value to another unit only if specified conditions prevail. Such assets or liabilities are called contingent assets or liabilities. They are not recognized

as financial assets or liabilities prior to the condition(s) being fulfilled. However, by conferring certain rights or obligations that may affect future decisions, they can produce an economic impact on the parties involved. As a result, supplementary information may be provided on significant contingent assets or liabilities.²

5.11 Although the value of future payments arising from equity, financial derivatives, index-linked instruments, insurance technical reserves, and provisions for standardized guarantees is uncertain, they are recognized as financial assets rather than as contingent assets. In these cases, the liability exists, but the amounts payable depend on subsequent events.

5.12 One-off guarantees of payment by third parties are contingent because payment is required only if the principal debtor defaults. However, provisions for calls under standardized guarantees are not considered to be contingent because of the more predictable expectation of payment under standardized guarantees. (Definitions of standardized and one-off guarantees are given in paragraph 5.68.)

5.13 Lines of credit, letters of credit, and loan commitments assure that funds will be made available, but no financial asset (i.e., loan) is created until funds are actually advanced. Letters of credit are promises to make payment only when certain documents specified by contract are presented. Note issuance facilities assure that parties will be able to sell short-term securities that they issue and that the financial corporations providing the facility will purchase any notes not sold in the market. Only if the financial corporation providing the facility makes funds available will it acquire an actual asset, to be recorded in its balance sheet. Uncalled share capital is contingent unless there is an obligation to pay the amount.

² Provisions for losses on assets are recorded as liabilities in monetary and financial statistics and are classified under other accounts payable.

5.14 Sums set aside in business accounting to provide for future liabilities or for future expenditures, such as provisions for losses on assets, are not recognized as liabilities. Only actual current liabilities to another party or parties are explicitly included in financial assets and liabilities. When the anticipated liability becomes actual, it is recognized. A future stream of revenue, such as future tax collections or royalties receipts, is not recognized as a financial asset.

5.XX Crypto assets designed to act as a general medium of exchange (or as a medium of exchange only within a platform) that do not have a corresponding liability are treated as nonproduced nonfinancial assets (see paragraphs xx, Chapter 14 a description of this category of crypto assets). Crypto assets are discussed in detail in Chapter 16 (paragraph 16.XX-XX).

6. Other issues

5.15 *Securities are debt and equity instruments that have the characteristic feature of negotiability.* That is, their legal ownership is readily capable of being transferred from one unit to another unit by delivery or endorsement. While any financial instrument can potentially be traded, securities are designed to be traded, usually on organized exchanges or “over the counter.” (The over-the-counter market involves parties negotiating directly with one another, rather than on a public exchange.) Negotiability is a matter of the legal form of the instrument. Some securities may be legally negotiable, but there is not, in fact, a liquid market where they can be readily bought or sold.

B. Classification of Financial Assets and Liabilities by Type of Instrument

1. Introduction to classification of particular financial assets and liabilities

5.17 This *Manual* uses three broad categories of financial assets and liabilities: (1) equity and investment fund shares, (2) debt instruments, and (3) other financial assets and liabilities. The *2025 SNA* and this *Manual* use an additional, more detailed classification of financial assets and liabilities. The classification is based primarily on the legal characteristics that describe the form of the underlying relationship between the parties to an instrument, which are also related to their liquidity and economic purpose. Although financial innovation leads to the emergence of new types of instruments, the classification is intended to provide broad categories that allow for international comparability and the inclusion of new instruments within the existing categories.




| Table 5.2. Returns on Financial Assets and Liabilities: Financial Instruments and Their Corresponding Type of Income | |
|---|--|
| <i>(Includes 2025 SNA codes)</i> | |
| Financial instrument | Type of income receivable/ payable on instrument |
| Equity and investment fund shares | |
| AF51 equity | D42 distributed income of corporations D43 reinvested earnings ¹ D41 interest ² |
| AF511+AF512 listed and unlisted shares | D421 dividends D43 reinvested earnings ¹ D41 interest ² |
| AF519 other equity and equity in international organizations | D422 Dividends and withdrawals from income of quasicorporations D43 reinvested earnings ¹ D41 interest ² |
| AF52 investment fund shares/units | D443 investment income attributable to investment fund shareholders (dividends, reinvested earnings, and imputed investment income) |
| Debt instruments | |
| AF12 special drawing rights | D41 interest |
| AF2 currency and deposits | D41 interest |
| AF3 debt securities | D41 interest |
| AF4 loans | D41 interest |
| AF6 insurance, pension, and standardized guarantee schemes | D44 other investment income |
| AF81 Trade credit and advances | D41 interest |
| AF89 other accounts receivable/payable | D41 interest |
| Other financial assets and liabilities | |
| AF11 monetary gold ³ | D41 interest ² |
| AF7 financial derivatives and employee stock options | none |

¹Reinvested earnings—a standard component for direct investment equity. A supplementary item for portfolio investment.

²By convention, lending fees on equity securities, gold loans, and gold swaps are classified as interest (see paragraph 11.67).

³Monetary gold consists of gold bullion and unallocated gold accounts. Gold bullion has no counterpart liability. However, the counterpart liability of unallocated gold accounts is in deposits.


 **5.18** Table 5.2 shows the *SNA* instruments classification and the corresponding type of income they generate. The linking of income with the corresponding assets and liabilities facilitates calculation of rates of return, which are useful for both analysis and data verification. Table 5.3 shows the *2025 SNA* classification and the corresponding broad categories in this Manual.

2. Equity and investment fund shares

5.19 Equity and investment fund shares have the distinguishing feature that they represent property rights on the institutional unit that issued the instrument and a residual claim on its assets after having met the obligations vis-à-vis debt holders. Equity represents the owners' funds in the institutional unit. In contrast to debt, equity does not generally provide the owner with a right to a predetermined amount or an amount determined according to a fixed formula.

5.20 Investment fund shares have a specialized role in financial intermediation as a kind of collective investment in other assets, so they are identified separately. Additionally, the treatment of portfolio investment income for investment fund shares differs from that for equity; in that reinvested earnings are imputed for investment fund shares (as shown in paragraphs 11.37–11.39).

a. Equity

5.21 *Equity consists of all instruments and records that acknowledge ownership rights and claims on the residual value of a corporation or quasi-corporation, after the claims of all creditors have been met. Equity is treated as a liability of the issuing institutional unit (a  corporation or other unit).*

5.22 Ownership of equity in legal entities is usually evidenced by shares, stocks, participations, depository receipts, or similar documents. Participating preferred shares are those that provide for participation in the residual value on the dissolution of an incorporated enterprise. Such shares are also equity securities, whether or not the income is fixed or determined according to a formula. (For nonparticipating preferred shares, see paragraph 5.46.) In addition to the issuance of shares, the value of equity can be affected by a range of factors, such as share premiums, accumulated reinvested or retained earnings, or revaluations. In addition, a direct investor may increase its equity in an affiliate by providing or paying for goods and services (see paragraph 8.17) consumed by or rendered to an affiliate, or assuming debt (see paragraph 8.45(c)).

| Table 5.3. 2025 SNA Financial Instruments Classification (with Corresponding <i>BPM7</i> Broad Categories) (Includes 2025 SNA codes) | |
|--|---|
| 2025 SNA financial assets and liabilities classification | broad international accounts category (<i>BPM7</i>) |
| AF11 monetary gold | |
| Gold bullion | }other financial assets |
| unallocated gold accounts | } and liabilities |
| AF12 special drawing rights | debt instruments |
| AF2 currency and deposits | }debt instruments |
| AF21 currency | } |
| AF221 interbank positions | } |
| AF229 other transferable deposits | } |
| AF29 other deposits | } |
| AF3 debt securities | debt instruments |
| AF4 loans | debt instruments |
| AF5 equity and investment fund shares | }equity |
| AF51 equity | } |
| AF511listed shares | } |
| AF512 unlisted shares | } |
| AF519 other equity and equity in international organizations | } |
| AF52 investment fund shares/units | } |
| AF521 money market fund shares/units | } |
| AF522 other investment fund shares/units | } |
| AF6 insurance, pension, and standardized guarantee schemes | }debt instruments |
| AF61 nonlife insurance technical reserves | } |
| AF62 life insurance and annuity entitlements | } |

| | | |
|---|---|------------------------|
| AF63 pension entitlements | } | |
| AF64 claims of pension funds on pension managers | } | |
| AF65 entitlements to nonpension benefits | } | |
| AF66 provisions for calls under standardized guarantees | } | |
| AF7 financial derivatives and employee stock options | } | other financial assets |
| AF71 financial derivatives | } | and liabilities |
| AF711 forward-type contracts | } | |
| AF712 option-type contracts | } | |
| AF72 employee stock options | } | |
| AF8 other accounts receivable/payable | } | debt instruments |
| AF81 Trade credit and advances | } | |
| AF89 other accounts receivable/payable | } | |

5.23 *Depository receipts are certificates that represent ownership of securities listed in other economies.* Depository receipts listed on one exchange represent ownership of securities listed on another exchange, and ownership of the depository receipts is treated as if it represents direct ownership of the underlying securities. Depository receipts facilitate transactions in securities in economies other than their home listing. The underlying securities may be equity or debt securities.

5.24 Equity may be split into:

- (a) listed shares,
- (b) unlisted shares, and
- (c) other equity and equity in international organizations.

Both listed and unlisted shares are equity securities (securities are defined in paragraph 5.15). *Listed shares are those listed on an exchange* and may sometimes be referred to as quoted shares. Unlisted shares may sometimes be referred to as private equity³ (venture capital often takes this form).

5.25 The existence of quoted prices of shares listed on an exchange means that current market prices are usually readily available. In addition to the valuation aspects, listed and unlisted shares typically have different regulatory requirements.

5.26 *Other equity and equity in international organizations are all forms of equity other than listed and unlisted shares.* Other equity can include equity in quasi-corporations, such as branches, trusts, limited liability and other partnerships, unincorporated funds, and notional units for ownership of real estate and other natural resources. The equity ownership of many international organizations (e.g., ownership of currency union central banks) is usually not in the form of tradable shares and so is classified in this item (see paragraph A3.44).

5.XX *Subscription rights are the rights for corporate shareholders to participate in the acquisition of shares newly issued by the corporation.* Subscription rights are designed to offset any potential dilution effect in the value of the stake of current shareholders resulting from the terms of issuance. By exercising the rights and buying a proportionate number of shares of the issuance, the investor maintains their percentage of ownership in the corporation. If the shareholders choose not to exercise the rights within the specified time frame, their ownership will be diluted. Subscription rights are classified as equity since the sum of the value of the shares

³Private equity refers to the source of equity funds being on private markets; however, private equity may be used to invest in listed shares, including to take over publicly listed companies, and delist them.

after the subscription issuance and that of subscription rights represents the total value of the corporation that issued the subscription rights.

5.27 The general principles of valuation given in paragraphs 3.84–3.91 apply to equity. However, because prices may not be observable for unlisted shares, equity in international organizations, and other equity, other methods are noted in paragraphs 7.15–7.18.

b. Investment fund shares or units

5.28 *Investment funds are collective investment undertakings through which investors pool funds for investment in financial or nonfinancial assets or both.* These funds issue shares (if a corporate structure is used) or units (if a trust structure is used). Investment funds include money market funds (MMF) and non-MMF investment funds, discussed further in paragraphs 4.73–4.74. Investment fund shares or units refer to the shares issued by mutual funds and unit trusts, rather than the shares they may hold.

5.29 *MMFs are investment funds that invest only or primarily in short-term money market securities such as treasury bills, certificates of deposit, and commercial paper.* MMF shares and units sometimes are functionally close to transferable deposits, for example, accounts with unrestricted check-writing privileges. If MMF shares are included in broad money in the reporting economy, they should be recorded as a separate item to allow reconciliation with monetary statistics. (See also paragraph 4.73 on MMFs as a subsector.)

5.30 Investment funds invest in a range of assets, such as debt securities, equity, commodity-linked investments, real estate, shares in other investment funds,

and structured assets. Data on the composition of their assets could be useful in economies in which investment funds are significant.

3. Debt instruments

Reference:

IMF and others, *External Debt Statistics: Guide for Compilers and Users*, paragraphs 2.3–2.11.

5.31 *Debt instruments are financial instruments that require the payment of principal and/or interest at some point(s) in the future.* Debt instruments consist of SDRs, currency and deposits, debt securities, loans, insurance technical reserves, pension and related entitlements, provision for calls under standardized guarantees, and other accounts receivable/payable. The term debt instrument is applicable to both the liability and the corresponding asset. Some instruments, such as currency and some deposits, pay no interest. With insurance and pension schemes, the income flow is called investment income attributable to insurance policyholders/investment income payable on pension entitlements, rather than interest.

5.32 Debt instruments can be contrasted with equity and investment shares in the nature of the liability and risk. Whereas equity gives a residual claim on the assets of the entity, a debt instrument involves an obligation to pay certain amounts of principal and/or interest usually according to a predefined formula, which usually means that the creditor has a more limited risk exposure. Provided that the debtor is solvent, debt obligations are largely fixed or linked by a formula to some other variable, such as a market interest rate or the price of a selected item.⁵ In contrast, the return on equity is largely dependent on the economic performance of the issuer. Because of the different nature of risk, debt is an important grouping for analysis.

⁵ Some pension entitlements (e.g., those in defined contributions schemes) may reflect investment performance of the pension schemes.

5.33 Because debt instruments involve an obligation to repay principal, short- or long-term classification (according to either original or remaining maturity) is of analytical significance. The maturity splits are explained in paragraphs 5.103–5.105.

a. Special drawing rights

5.34 *SDRs are international reserve assets created by the IMF and allocated to its members to supplement existing reserve assets.* SDRs are held only by the monetary authorities of IMF members and a limited number of international financial institutions that are authorized holders. SDR holdings represent unconditional rights to obtain foreign exchange or other reserve assets from other IMF members. (For more information, see paragraph 7.83.)

5.35 Holdings of SDRs by an IMF member are recorded as an asset, while the allocation of SDRs is recorded as the incurrence of a liability of the member receiving them (because of a requirement to repay the allocation in certain circumstances, and also because interest accrues). The holdings and allocations should be shown gross, rather than netted.

5.XX Domestic arrangements for holding SDRs and the accounting treatment may differ across IMF members according to differences in legal and institutional frameworks. The majority of members record the SDR positions on the central bank's balance sheet while some members record them on the balance sheet of a government agency. Regardless of where SDRs are recorded, the country's reserve assets increase with the allocation.

b. Currency and deposits

Currency

5.36 *Currency consists of notes and coins that are of fixed nominal values and are issued or authorized by the central bank or government. Currency can also be issued digitally (i.e., central bank digital currencies).*

5.37 Some countries issue gold coins, which are held for intrinsic value, or commemorative coins, which are held for numismatic value. If not in active circulation, such coins are not classified as financial assets but as goods (except for gold coins that are classified as monetary gold; see paragraph 6.78). Similarly, central bank or central government holdings of unissued or demonetized currency are not financial assets. (Acquisition of unissued currency by a monetary authority from a printer or coin manufacturer is included in goods; see paragraph 10.17(a).)

5.38 Foreign currency in circulation, including as legal tender, is shown as a currency asset of the resident holder and as a liability of the issuer. Transactions that take place between residents settled in foreign currency in circulation are domestic transactions. Currency is discussed as a financial instrument in this section. The term “currency” is also used to classify the denomination of all kinds of instruments as being denominated in either domestic currency or foreign currency (as discussed further in paragraphs 3.98–3.103).

Deposits

5.39 *Deposits include all claims that are (a) on the central bank, deposit-taking corporations other than the central bank, and, in some cases, other institutional units; and (b) represented by evidence of deposit. A deposit is usually a standard contract, open to the public at large, that allows the placement of a variable amount of money. The*

nominal value of deposits is usually fixed in terms of the currency in which the deposits are denominated. In some cases, deposits may have their value expressed in terms of an index or linked to a commodity price, for example, gold, oil, or share prices, or the price of a crypto asset without a corresponding liability. Unallocated accounts for precious metals are also deposits, except for unallocated gold accounts held by monetary authorities for reserves purposes, for which the asset holding is included in monetary gold (with the counterpart liability being recorded as a deposit—see paragraph 5.77).

5.40 Deposits are distinguished from loans on the basis of the representation in the documents that evidence them. There may be cases in which the distinction is unclear, because the parties are uncertain or take different views. When one party is a deposit-taking corporation and the other is not, a possible convention is that an asset position of a deposit-taking corporation is classified as a loan by both parties. Similarly, a liability of a deposit-taking corporation to another type of entity is classified as a deposit by both parties. Classification of interbank positions as deposits is discussed in paragraph 5.42.

Transferable deposits

5.41 *Transferable deposits consist of all deposits that are (a) exchangeable for currency on demand at par and without penalty or restriction and (b) directly usable for making payments by check, draft, giro order, direct debit or credit, or other direct payment facility.* Some types of deposit accounts embody only limited features of transferability. For example, some deposits have restrictions such as on the number of third-party payments that can be made per period or on the minimum size of the individual third-party payments. An overdraft arising from the overdraft facility of a

transferable deposit account is classified as a loan. Transferable deposits include electronic money when they are liabilities of deposit-taking corporations.

Interbank positions

5.42 Interbank positions can be shown as a separate component of deposits. Interbank positions should be classified in the relevant instrument categories. When there is uncertainty between a loan and a deposit, interbank positions should be recorded under deposits.

Other deposits

5.43 *Other deposits consist of all claims, other than transferable deposits, that are represented by evidence of deposit.* Other deposits include savings and fixed-term deposits, and nonnegotiable certificates of deposit. (Negotiable certificates are classified as debt securities.) Restricted deposits, defined as those for which withdrawals are restricted on the basis of legal, regulatory, or commercial requirements, are included in other deposits, as well as shares or similar evidence of deposit issued by savings and loan associations, building societies, credit unions, and the like. Liabilities under securities repurchase agreements that are included in national measures of broad money are also other deposits (while liabilities under other repurchase agreements are included in loans). Similarly, repayable margins for financial derivatives and other cash collateral are included in other deposits if they involve liabilities of a deposit-taking corporation or are included in national measures of broad money. Other repayable margins for financial derivatives (see paragraph 5.94) are included in loans or accounts payable/receivable. Reserve position in the IMF (see paragraph 6.85) is included in other deposits.

Central bank swap arrangements

5.XX Deposits include assets created under central bank swap arrangements that involve the temporary exchange of deposits between the central banks of two economies (central bank swap arrangements are discussed in paragraphs 6.102-104).

c. Debt securities

5.44 Debt securities are negotiable instruments serving as evidence of a debt. They include bills, bonds, notes, negotiable certificates of deposit, commercial paper, debentures, asset-backed securities, money market instruments, and similar instruments normally traded in the financial markets. Bills are defined as securities that give the holders the unconditional rights to receive stated fixed sums on a specified date. Bills are generally issued at discounts to face value that depend on the rate of interest and the time to maturity and are usually traded in organized markets. Examples of short-term securities are treasury bills, negotiable certificates of deposit, bankers' acceptances, promissory notes, and commercial paper. Debt securities give the holders the unconditional right to fixed or contractually determined variable payments (i.e., earning of interest is not dependent on earnings of the debtors). Depository receipts whose underlying securities are debt securities are debt securities (see paragraph 5.23).

Possible reclassification of traded loans as securities

5.45 Loans that have become negotiable from one holder to another are to be reclassified from loans to debt securities under certain circumstances. For such reclassification, there needs to be evidence of secondary market trading, including

the existence of market makers, and frequent quotations of the instrument, such as provided by bid-offer spreads.

Nonparticipating preferred stocks and convertible bonds

5.46 Nonparticipating preferred stocks or shares are those that pay a fixed income but do not provide for participation in the distribution of the residual value of an incorporated enterprise on dissolution. These shares are classified as debt securities. (See also paragraph 5.22 concerning participating preferred shares.) Bonds that are convertible into equity should be classified as debt securities prior to the time that they are converted.

Asset-backed securities

5.47 Asset-backed securities, collateralized debt obligations, and collateralized mortgage obligations are arrangements under which payments of interest and principal are backed by payments on specified assets or income streams. Asset-backed securities are backed by various types of financial assets (e.g., mortgages and credit card loans), pools of leased property, nonfinancial assets, or future income streams—such as the earnings of a musician or a government's future revenue—that are not recognized as economic assets in macroeconomic statistics. Securitization of these assets provides liquidity in assets that are otherwise not so liquid.⁶ Asset-backed securities may be issued by a specific holding unit or vehicle, which issues securities that are sold to raise funds to pay the originator for the underlying assets. Asset-backed securities are classified as debt securities because the security issuers have a requirement to

⁶Another term used is “structured finance.” This refers to the repackaging of existing financial assets—securities, loans, or other assets—into new instruments that are structured to meet the liquidity, creditworthiness, and return preferences of particular investors. These arrangements may incorporate financial derivatives.

make payments, while the holders do not have a direct exposure to the risks of and residual claim on the underlying assets; if they did, the instrument would be equity or investment funds shares.

Bankers' acceptances

5.48 *Bankers' acceptances are negotiable orders (drafts or bills of exchange) to pay a specific amount of money on a future date, accepted and guaranteed by a financial corporation, in return for a fee. Much international trade is financed this way.*

Bankers' acceptances are classified under the category of debt securities. Bankers' acceptances represent unconditional claims on the part of the holder and an unconditional liability on the part of the accepting financial corporation; the financial corporation's counterpart asset is a claim on its customer. Bankers' acceptances are treated as financial assets from the time of acceptance, even though funds may not be exchanged until a later stage.

Index-linked securities

5.49 *Index-linked securities are those for which either the coupon payments (interest) or the principal or both are linked to another item, such as a price index, an interest rate, or the price of a commodity. These securities are classified as variable-rate instruments (see paragraph 5.113). Issues for the measurement of revaluations and interest are discussed in paragraphs 9.34 and 11.59–11.65, respectively.*

Stripped securities

5.50 *Stripped securities are securities that have been transformed from a principal amount with coupon payments into a series of zero-coupon bonds (i.e., debt securities that have a single payment at maturity with no coupon payments), with a range of maturities matching the coupon payment date(s) and the redemption date of the*

principal amount(s). They are also called strips. The function of stripping is that investor preferences for particular cash flows can be met in ways that are different from the mix of cash flows of the original security. Stripped securities may have a different issuer from the original issuer—in which case new liabilities are created. Following are the two cases of stripped securities:

- When a third party acquires the original securities and uses them to back the issue of the stripped securities. Then new funds have been raised and a new financial instrument is created.
- When no new funds are raised and the payments on the original securities are stripped and separately marketed by the issuer or through agents (such as strip dealers) acting with the issuer's consent.

(Paragraph 11.58 discusses how interest on stripped securities is calculated on an accrual basis.)

d. Loans

5.51 *Loans are financial assets that are created when a creditor lends funds directly to a debtor, and are evidenced by documents that are not negotiable.*⁷ This category includes all non-negotiable claims other than deposits entailing fixed cash flows (or cash flows with determined by a formula), including those emerging from overdraft facilities, except accounts receivable/payable, which are treated as a separate category of financial assets. Loans that have become negotiable and been recorded in debt securities (as noted in paragraph 5.45) are also excluded from loans. This category includes installment loans, hire-purchase credit, and loans to finance

⁷Negotiability is defined in paragraph 5.15. Loans may be traded, but their legal form is not designed for negotiability in the same way as debt securities.

trade,⁸ factoring claims,⁹ and cash collateral claims, including repayable margins for financial derivatives, if they are not recorded in deposits or accounts payable/receivable.¹⁰ Claims on or liabilities to the IMF (including use of IMF credit) that are in the form of loans are also included in this category (see also paragraph 6.85 on the treatment of loans provided to the IMF General Resources Account; and Annex 7.1 on loans and credit from the IMF). An overdraft arising from the overdraft facility of a transferable deposit account is classified as a loan. However, undrawn lines of credit are not recognized as a liability. The distinction between loans and deposits is discussed under deposits in paragraph 5.40.

Securities repurchase agreements and gold swaps

Reference:

BIS, *Securities Lending Transactions: Market Development and Implications*, CPSS Publications No. 32, July 1999.

5.52 *A securities repurchase agreement (repo) is a contractual arrangement involving the sale of securities for cash, at a specified price, with a commitment to repurchase the same or similar securities at a fixed price either on a specified future date (often one or a few days hence, but also further in the future) or an “open” maturity. The supply and receipt of cash under a securities repurchase agreement is treated as a loan or deposit. Margin calls in cash under a repo are also classified as loans or deposits (see paragraph 5.94 on margins for financial derivatives). It is generally a*

⁸ These types of loans should not be mistaken for trade credit and advances.

⁹ The factoring income is recorded as a fee (see paragraph 12.XX).

¹⁰ Repayable margin payments in cash are classified in deposits if the debtor's liabilities are included in broad money. If not, they are recorded in either loans or accounts payable/receivable.

loan, but it is classified as a deposit if it involves liabilities of a deposit-taking corporation or is included in national measures of broad money. If a securities repurchase agreement does not involve the supply of cash (i.e., there is an exchange of one security for another, or one party supplies a security without collateral), there is no loan or deposit.

5.53 Repos, securities lending with cash collateral, and sale-buybacks are different terms for arrangements with the same economic effect as a securities repurchase agreement—all involve the provision of securities as collateral for a loan or deposit. A repo is used as a term from the perspective of the security provider, while a reverse repo is used from the perspective of the security taker. Securities repurchase agreements are a subset of reverse transactions (as discussed in paragraphs 7.58–7.61 and Annex 7).

5.54 The securities provided as collateral under securities lending, including a securities repurchase agreement, are treated as not having changed economic ownership, as discussed in paragraph 7.58. This treatment is adopted because the cash receiver is still subject to the risks or benefits of any change in the price of the security. (The same treatment is adopted for repurchase agreements without cash collateral, in which case there is no transaction in the securities and no loan.)

5.55 *A gold swap involves an exchange of gold for foreign exchange deposits with an agreement that the transaction be reversed at an agreed future date at an agreed gold price.* The gold taker (cash provider) usually will not record the gold on its balance sheet, while the gold provider (cash taker) usually will not remove the gold from its balance sheet. In this manner, the transaction is analogous to a repurchase agreement and

should be recorded as a collateralized loan or deposit. Gold swaps are similar to securities repurchase agreements except that the collateral is gold.¹¹

Financial leases

References:

2025 SNA, Chapter 17, Cross-Cutting and Other Special Issues, Part 5, Contracts, leases and licenses.

International Accounting Standards Board, *International Financial Reporting Standards*, International Accounting Standard 17, Leases.

5.56 *A financial lease is a contract under which the lessor as legal owner of an asset conveys substantially all the risks and benefits of ownership of the asset to the lessee. In other words, the lessee becomes the economic owner of the asset. Under a financial lease, the lessor is shown as making a loan to the lessee with which the lessee acquires the asset. Thereafter the leased asset is shown on the balance sheet of the lessee and not of the lessor; the corresponding loan is shown as an asset of the lessor and a liability of the lessee.*

5.57 Examples of situations that would normally lead to a lease being classified as a financial lease include that:

- (a) the lease transfers legal ownership to the lessee at the end of the lease term; or
- (b) the lease has the option for the lessee to acquire legal ownership at the end of the lease term at a price that is sufficiently low that the exercise of the option is reasonably certain; or

¹¹Gold swaps should not be confused with a swap giving rise to a financial derivative. The two types of arrangements have different risk transfer implications; under a gold swap, the economic ownership of the gold does not change hands (see paragraph 5.91).

- (c) the lease term is for the major part of the economic life of the asset; or
- (d) at inception, the present value of the lease payments amount to substantially all of the value of the asset; or
- (e) if the lessee can cancel the lease, the lessor's losses are borne by the lessee; or
- (f) gains or losses in the residual value of the residual asset accrue to the lessee; or
- (g) the lessee has the ability to continue the lease for a secondary period for a payment substantially lower than market value.

These examples may not be conclusive that substantially all of the risks have been conveyed; for example, if the asset is conveyed to the lessee at the end of the lease at its fair value at that time, then the lessor holds substantial risks of ownership. Financial leases are also called finance leases or capital leases, highlighting that the motivation is to finance acquisition of the asset. In addition to financial leases recognized in business accounts, a treatment akin to financial leases is adopted for some public-private partnerships¹² (see *2025 SNA*, Chapter 30, The General Government and Public Sectors).

5.58 The treatment of financial leases is designed to move away from the legal arrangements to capture the economic reality of such arrangements, by treating assets under a financial lease as if they were purchased and owned by the user. For example, if a bank leases an aircraft to an aviation company, at the time the company is deemed to take economic ownership of the aircraft, it is shown as an

¹²For example, a build, own, operate, transfer scheme could be found to assign the risks and benefits of ownership to the government, so the private partner would be treated as a provider of a financial lease.

asset in the balance sheet of the aviation company, while the loan is recorded as a liability. That is, the IIP will show a loan between the aviation company and the bank.

5.59 The debt liability at the inception of the lease is defined as the value of the asset and is financed by a loan of the same value, a liability of the lessee. The loan is repaid through payments during the contract (which consist of interest, principal, and, if a financial intermediary is involved, FISIM (financial intermediation services indirectly measured) elements) and any residual payment at the end of the contract (or alternatively, by the return of the good to the lessor).

5.60 Financial leases may be distinguished from other kinds of leases identified in macroeconomic statistics because substantially all the risks and benefits of ownership are transferred from the legal owner of the good (the lessor) to the user of the good (the lessee). Other kinds of leases are as follows:

- (a) Operating leases. An operating lease is one in which the legal owner of a produced asset is also the economic owner and has the operating risks and benefits from ownership of the asset. One indicator of an operating lease is that it is the responsibility of the legal owner to provide any necessary repair and maintenance of the asset. Under an operating lease, the asset remains on the balance sheet of the lessor. Operating leases give rise to services, as discussed in more detail in paragraphs 10.153–10.157.
- (b) Resource leases. A resource lease is an agreement whereby the legal owner of a natural resource makes it available to a lessee in return for a regular payment, which is recorded as rent. The resource continues to be recorded on the balance sheet of the lessor even though it is used by the lessee. Other arrangements involving natural resources may amount to an outright sale of a natural resource to the lessee (such as spectrum licenses for a long period;

see paragraph 13.9). Some leases of natural resources, such as mining licenses held by nonresidents lead to the imputation of a notional resident unit (see paragraphs 4.34–4.40), so that the lease is between residents, and the international transactions associated with the lease are recorded as being for direct investment equity in the notional unit.

Financial or finite risk reinsurance

5.61 *Financial or finite risk reinsurance is defined as a kind of insurance policy that involves no or very limited transfer of risk.* Depending on how much risk is transferred, it could be classified as a loan or an insurance policy. For example, an insurance company may have a finite risk reinsurance policy that allows it to borrow funds in the event of incurring large values of claims. Because those amounts are repayable, however, the policy has a financing function and amounts drawn under the policy are classified as a loan. In contrast, if the amounts under the policy are not repayable, then risk is transferred to the reinsurer, so it has a risk pooling function and is a part of insurance.

Factoring

5.XX *Factoring is a transaction in which a factor, which can be a bank, a specialized factoring company, or other financial organization, buys trade accounts receivable from a supplier at a discount.* Factoring is commonly viewed as a purchase or sale of invoices transferring the legal right of the claim on the debtor to the factor. In factoring, the indirect financing by the factor to the debtor is treated as a loan. The accounts receivable concerned are trade-related receivables arising from the provision of goods, services, or work in progress. There are two basic types of factoring: non-recourse and recourse factoring. In a non-recourse agreement, the factor assumes the full risk of non-payment by the debtors at maturity and therefore

may charge the supplier a higher fee. In a recourse agreement, all or part of the risk is kept by the supplier. The factor may also keep a reserve that should be paid back to the supplier once the debtor pays its liability in full. The instrument reclassification from trade credit to a loan should be recorded as a transaction in the financial account. The recourse is seen as a guarantee treated as a contingent liability for the supplier, which should therefore not be recorded unless and until being activated by the factor. The factoring income is treated as a fee paid by the supplier (see paragraph 11.XX).¹³ The reserve held by a factor is classified as a deposit, a loan, or in accounts receivable/payable, following the recording of other cash collaterals (e.g., repayable margins for financial derivatives).

e. Insurance, pension, and standardized guarantee schemes

5.62 *Insurance, pension, and standardized guarantee schemes consist of the following (see paragraph A6c.3 for the characteristics of non-life and life insurance):*

(a) nonlife insurance technical reserves;

(b) life insurance and annuity entitlements;

(c) pension entitlements and claims of pension funds on pension managers; and

(d) provisions for calls under standardized guarantees.

5.63 These reserves, entitlements, and provisions represent liabilities of the insurer, pension fund, or issuer of standardized guarantees, and a corresponding asset of the policyholders or beneficiaries. The aggregate values of liabilities can be estimated actuarially because the company or fund has a pool of liabilities, but the

¹³ The indirect financing by the factor to the debtor is treated as a loan, but it does not generate interest or FISIM.

value is less clear from the perspective of the individual asset holders. The insurers, pension funds, and guarantors usually hold a range of assets to allow them to meet their obligations; however, these are not necessarily equal to the relevant liabilities.

Nonlife insurance technical reserves

5.64 Nonlife insurance technical reserves consist of the following:

(a) Reserves for unearned insurance premiums, which are prepayment of premiums.

Premiums are usually paid at the beginning of the period covered by the policy. On an accrual basis, the premiums are earned through the policy period, so that the initial payment involves a prepayment or advance.

(b) Reserves against outstanding insurance claims, which are amounts identified by insurance corporations to cover what they expect to pay out arising from events that have occurred but for which the claims are not yet settled. It also includes reserves for unexpired risks (estimated payments for unfiled claims during the period for which the premium is earned). Other reserves, such as equalization reserves, may be identified by insurers. However, these are recognized as liabilities and corresponding assets only when there is an event that gives rise to a liability. Otherwise, equalization reserves are internal accounting entries by the insurer that represent saving to cover irregularly occurring catastrophes, and thus do not represent any existing corresponding claims for policyholders.

Both nonlife direct insurance and reinsurance are included in this item.

Reference: IF.1/Chapter 17 (e.g., Takaful and Re-takaful arrangements)

Life insurance and annuity entitlements

Reference:

2025 SNA, Chapter 24, Insurance and pensions (to be updated)

5.65 This category consists of reserves of life insurance companies and annuity providers for prepaid premiums and accrued liabilities to life insurance policyholders and beneficiaries of annuities. Life insurance and annuity entitlements are used to provide benefits to policyholders upon the expiry of the policy, or to compensate beneficiaries upon the death of policyholders, and thus are kept separate from shareholders' funds. These entitlements are regarded as liabilities of the insurance companies and assets of the policyholders and beneficiaries. Annuities entitlements are the actuarial calculation of the present value of the obligations to pay future income until the death of the beneficiaries.

Hybrid insurance products

5.XX Hybrid insurance products that have characteristics of both life and nonlife insurance are allocated to life or nonlife insurance depending on which features are predominant, i.e., the saving component (life insurance) or the component whereby claims are paid only if the insured event occurs (nonlife insurance). While some insurance policies may contain hybrid features, there is usually a predominant benefit and purpose for which the policy is intended, and other features are just value-added benefits to make the policy more appealing to the customers.

Pension entitlements

Reference:

2025 SNA, Chapter 24, Insurance and pensions (to be updated)

5.66 Pension entitlements show the extent of financial claims both existing and future pensioners hold against either their employer or a fund designated by the employer to pay pensions earned as part of a compensation agreement between the employer and employee. Pension entitlements also arise from autonomous employer-independent pension schemes or funds if accumulated contributions are set aside for retirement income and are subject to regulation or supervision in line with or similar to employer-related pension schemes or funds. The economy of residence of pension schemes may differ from that of some of their beneficiaries, in particular, for border workers, guest workers who return home, people who retire to a different economy, staff of international organizations, and employees of transnational enterprise groups that have a single pension fund for the whole group. In addition to liabilities of funded pension schemes, liabilities of unfunded pension schemes may be included in this category if they are not intertwined with social security schemes. There are assumptions and different methods in the measurement of pension fund entitlements, so the nature of coverage and estimation should be stated in metadata.

5.67 Pension entitlements related to social security schemes are generally not recognized as financial assets or liabilities, given that they are imposed by a general government law and sometimes subject to retrospective adjustments of the amounts payable. On the other hand, pension entitlements derived from an employer-employee relationship are generally recognized, unless they are intertwined with the social security schemes. This could also apply to pension

entitlements of pension schemes where a government or another public unit is the employer. Such entitlements would qualify as financial assets or liabilities if the pension entitlements can be regarded as part of the conditions of employment and the employment contract underlying the scheme limits retrospective adjustments of the amounts payable in a similar way as pension entitlements from an employer-employee relationship with a private employer. This is particularly the case when the pension fund for government employees is clearly separated from the social security schemes.

5.XX An employer may contract with a third party to administer the pension funds for the employees. If the employer retains the responsibility for any deficit in funding as well as the right to retain any excess funding, the employer is described as the pension sponsor and the unit working under the direction of the pension sponsor is described as the pension administrator. If the agreement between the employer and the third party acting as an administrator is such that the employer passes the risks and responsibilities for any deficit in funding to the third party in return for the right of the third party to retain any excess, the third party becomes the pension sponsor as well as the administrator. A funding deficit or excess of the pension fund to be paid by/to the sponsor is also recorded in this item.

Issues relating to the treatment of insurance in international accounts are explained in more detail in Appendix 8.

Provisions for calls under standardized guarantees

Reference:

2025 SNA, Chapter 25, Selected issues on financial instruments (to be updated)

5.68 *Standardized guarantees are defined as those that are not provided by means of a financial derivative (such as credit default swaps), but for which the probability of default can be well established.* Standardized guarantees are issued in large numbers, usually for fairly small amounts, along identical lines. These guarantees cover similar types of credit risk for a large number of cases. Examples include guarantees issued by governments on export credit or student loans. Generally it is not possible to estimate precisely the risk of any one loan being in default, but it is possible to make a reliable estimate of how many out of a large number of such loans will default. It is therefore possible for a guarantor to determine suitable fees to charge for a guarantee working on the same sort of principle as an insurance corporation for which the fees received in respect of many policies cover the losses by a few. Standardized guarantees can be contrasted with two other types of guarantees:

(a) Guarantees that are financial derivatives (as defined in paragraph 5.80).

Guarantees that meet the definition of financial derivatives protect, on a guarantee-by-guarantee basis, the lender against certain types of risk arising from a credit relationship by paying the guarantor a fee for a specified period. The guarantees covered are such that experience in the market allows the guarantor to apply standard master legal agreements or to make a reasonable estimate of the likelihood of the borrower defaulting and to calculate suitable terms for the financial derivative. Credit default swaps are included in financial derivatives as option-type contracts.

(b) One-off guarantees. *One-off guarantees occur in situations in which the conditions of the loan or of the security that is guaranteed are so particular that it is not possible for the degree of risk associated with it to be calculated with any degree of precision.*

These guarantees are not recognized as economic assets until their activation, that is, when the event occurs that makes the guarantor

responsible for the liability. These are contingent assets until activated (see paragraph 5.12). (See paragraphs 8.42–8.45 on flows associated with their activation.) However, one-off guarantees granted by governments to corporations in financial distress and that have a very high likelihood of being called are treated as if they were activated at inception (see paragraph 13.34).

5.XX Provisions for calls under standardized guarantees consist of prepayments of net fees and provisions to meet outstanding calls under standardized guarantees. The transactions of provisions for calls under standardized guarantee schemes recorded in the financial account are similar to those of reserves for nonlife insurance; they include unearned fees and claims not yet settled.

f. Trade credit and advances

5.70 *Trade credit and advances consist of (a) credit extended in the form of deferred payment directly by the suppliers of goods and services to their customers¹⁴ and (b.1) advances for work that is in progress (or is yet to be undertaken) and (b.2) prepayment by the buyers for goods and services not yet provided.*

5.71 Trade credit and advances arise when payment for goods or services (other than FISIM and prepayment of insurance services)¹⁵ is not made at the same time as the change in ownership of a good or provision of a service. If a payment is made before the change of ownership, there is an advance. For example, down

¹⁴Trade credit is sometimes described as supplier credit or supplier's credit.

¹⁵FISIM accrued but not yet paid is included with the relevant debt instrument, like interest (see paragraph 7.41). Prepayment of insurance premiums is included in insurance technical reserves (see paragraph 5.64).

payments or holding deposits (where ownership of the funds changes hands) are included in trade advances. Changes of ownership for high-value capital goods may give rise to trade credit and advances, only if there is a difference in timing between the change of ownership and progress payments (see paragraphs 3.44 and 10.28). If goods or services under barter arrangements do not change ownership at the same time as the corresponding goods or services, an entry is made for trade credit and advances.

5.72 Trade credit and advances do not include loans to finance trade made by an institutional unit other than the supplier of the good or service, as they are included under loans.¹⁶ Trade bills drawn on an importer and provided to an exporter, which are subsequently discounted by the exporter with a financial institution, might be regarded by the importer as the direct extension of credit by the exporter, but once they are discounted they become a claim by a third party on the importer. In cases in which an instrument is provided to the exporter with such characteristics that it is a negotiable instrument, it should be classified as a security. A supplier may also sell trade claims other than trade bills to a factoring company, in which the claim is reclassified from trade credit to a loan (see paragraph 5.XX).

g. Other accounts receivable/payable

5.73 Other accounts receivable/payable includes accounts receivable or payable such as liabilities for taxes, purchase and sale of securities, securities lending fees, gold loan fees, wages and salaries, dividends, and social contributions that have accrued but not yet paid. It also includes prepayments of those items. Claims arising from cash collateral agreements (including repayable margins for

¹⁶Trade-related credit is identified as a concept in *External Debt Statistics: Guide for Compilers and Users*, Chapter 6, Further External Debt Accounting Principles. It consists of trade credit as well as trade bills and credit provided by third parties to finance trade. It should be compiled as a supplementary item, where significant.

financial derivatives) are also included if they are not recorded in deposits or loans. Interest accrued should be recorded with the financial asset or liability on which it accrues, not as other accounts receivable/payable. However, for securities lending and gold loan fees, which are treated as interest by convention (see paragraphs 11.67–11.68), the corresponding entries are included under other accounts receivable/payable, rather than with the instrument to which they relate.

5.XX An emissions permit (cap-and-trade) system is a flexible market mechanism that establishes a maximum level of pollution - a cap. Enterprises must have a permit to cover each unit of pollution they produce. Each permit stipulates the amount of greenhouse gas emissions that can be emitted (quota). Payments for such emission permits are recorded as prepaid taxes on production, with taxes recorded at the time of surrender, at issuance prices. As such, they are recorded in other accounts receivable and payable.

4. Other financial assets and liabilities

a. Monetary gold

5.74 Monetary gold is gold to which the monetary authorities (or others who are subject to the effective control of the monetary authorities) have title and is held as reserve assets. Gold includes gold bullion and unallocated gold accounts with nonresidents that give title to claim the delivery of gold. Gold bullion takes the form of coins, ingots, or bars with a purity of at least 995 parts per 1,000, including such gold held in allocated gold accounts.

5.75 All monetary gold is included in reserve assets or is held by international financial organizations. Monetary authorities and reserve assets are discussed further in Chapter 6, Functional Categories, Section F. Gold bullion included in

monetary gold is a financial asset for which there is no corresponding liability. Gold bullion not held as reserve assets is not a financial asset and is included in nonmonetary gold, within the goods account, see paragraphs 10.50–10.54. In some cases, a central bank may own gold bullion that is not held as reserves (such as sometimes occurs when it acts as a monopoly reseller of mined gold).

Gold accounts

Allocated gold accounts

5.76 *Allocated gold accounts provide ownership of a specific piece of gold.* The ownership of the gold remains with the entity placing it for safe custody. These accounts typically offer the purchasing, storing, and selling of investment-grade bars and coin to order. Accounts of this type constitute full outright ownership of the gold. In a pool allocated gold account, a depository sets aside numbered bars into a segregated pool, which backs the amount of allocated gold the depository owes to their customers. In external sector statistics, pool allocated gold accounts are recorded in the same way as allocated gold accounts. When held as reserve assets, allocated gold accounts are classified as monetary gold. When not held as reserve assets, allocated gold accounts are treated as representing ownership of a good.

Unallocated gold accounts

5.77 In contrast, *unallocated gold accounts represent a claim against the account operator to deliver gold.* For these accounts, the account provider holds title to a reserve base of physical (allocated) gold and issues claims to account holders denominated in gold. When held as reserve assets, unallocated gold accounts are classified as monetary gold. Unallocated gold account assets not held as reserve assets, and all unallocated gold account liabilities, are classified as deposits. Gold accounts can be distinguished from accounts that are linked (indexed) to gold but

do not give title to claims for the delivery of gold; such accounts are not part of monetary gold. They are classified according to their nature as a financial instrument, usually as deposits.

Relationship to nonmonetary gold

5.78 In contrast to monetary gold, which is a financial asset, nonmonetary physical gold is a good. (Paragraphs 10.50–10.54 deal with nonmonetary gold in the goods and services account.) Similarly, other precious metals are goods, not financial assets. Monetary gold is treated differently because of its role as a means of international payments and store of value for use in reserve assets. Changes in the classification between monetary and nonmonetary gold are shown in the other changes in assets and liabilities account, as discussed in paragraphs 9.18–9.20.

b. Financial derivatives and employee stock options (see Annex 7)

5.79 Financial derivatives and employee stock options are financial assets and liabilities that have similar features, such as a strike price and some of the same risk elements. However, although both transfer risk, employee stock options are also designed to be a form of remuneration.

Financial derivatives

5.80 *A financial derivative contract is a financial instrument that is linked to another specific financial instrument or indicator or commodity and through which specific risks (such as interest rate risk, foreign exchange risk, equity and commodity price risks, credit risk, and so on) can be traded in their own right in financial markets.* Transactions and positions in financial derivatives are treated separately from the values of any underlying items to which they are linked.

5.81 The risk embodied in a financial derivative contract can be traded either by trading the contract itself, as is possible with options, or by creating a new contract embodying risk characteristics that match, in a countervailing manner, those of the existing contract. The latter practice, which is termed offsetability, occurs in forward markets. Offsetability means that it is often possible to eliminate the risk associated with a derivative by creating a new but “reverse” contract having characteristics that countervail the risk underlying the first derivative. Buying the new derivative is the functional equivalent of selling the first derivative because the result is the elimination of the underlying financial risk. The ability to countervail the underlying risk in the market is therefore considered the equivalent of tradability in demonstrating value. The outlay that would be required to replace the existing derivative contract represents its value; actual offsetting is not required.

5.82 In many cases, derivatives contracts are settled by payments of net amounts in cash, rather than by the delivery of the underlying items. Once a financial derivative reaches its settlement date, any unpaid overdue amount is reclassified as other accounts receivable/payable, as its value is fixed, and thus the nature of the claim becomes debt.

5.83 The following types of financial arrangements are not financial derivatives:

- (a) A fixed-price contract for goods and services is not a financial derivative unless the contract is standardized so that the market risk therein can be traded in financial markets in its own right. For example, an option to purchase an aircraft from the manufacturer is not classified as a financial derivative.

- (b) Insurance and standardized guarantees are not financial derivatives. Insurance involves the collection of funds from policyholders to meet future claims arising from the occurrence of events specified in insurance policies. That is, insurance and standardized guarantees are used to manage event risk primarily by the pooling, not the trading, of risk. However, some guarantees other than standardized guarantees meet the definition of financial derivatives (as covered in paragraph 5.68).
- (c) Contingent assets and liabilities, such as one-off guarantees and letters of credit, are not financial assets (as discussed in paragraphs 5.10–5.13).
- (d) Instruments with embedded derivatives are not financial derivatives. *An embedded derivative arises when a derivative feature is inserted in a standard financial instrument and is inseparable from the instrument.* If a primary instrument, such as a security or loan, contains an embedded derivative, the instrument is classified according to its primary characteristics—even though the value of that security or loan may well differ from the values of comparable securities and loans because of the embedded derivative.¹⁷ Examples are bonds that are convertible into shares, and securities with options for repayment of principal in currencies that differ from those in which the securities were issued. However, detachable warrants are treated as separate financial derivatives, because they can be detached and sold in financial markets.
- (e) Timing delays that arise in the normal course of business and may entail exposure to price movements do not give rise to financial derivatives. Timing delays include normal settlement periods for spot transactions in financial markets.

¹⁷If the owner of the primary instrument subsequently creates a new but reverse financial derivative contract to offset the risk of the embedded derivative, the creation of this new financial derivative contract is recorded as a separate transaction, and it does not affect the recording of transactions and positions in the primary instrument.

- (f) Gold swaps and most central bank swap arrangements are not financial derivatives¹⁸
- (g) Subscription rights are classified as equity, rather than financial derivatives, since the sum of the value of the shares after the subscription issuance and that of subscription rights represents the total value of the corporation that issued the subscription rights.

5.84 There are two broad types of financial derivatives—option-type contracts and forward-type contracts. Option-type of contracts entail two payment streams, a "premium leg", comprising of fixed payments from the buyer to the seller, and a "contingent leg", comprising payments from the seller to the buyer depending on the underlying asset's pricing, whereas forward-type contracts entail contingent payments between the parties involved depending on the underlying asset's pricing. The contingent leg in an option-type contract usually entails a single payment at maturity; the premium leg in standard put and call options consists in a single payment at inception.

5.85 Option-type contracts can be contrasted with forward-type contracts in that:

- (a) at inception, there is usually no up-front payment for a forward-type contract and the derivative contract begins with zero value, whereas there is usually a premium paid for an option-type contract representing a nonzero value for the contract;

¹⁸ Most central bank swap arrangements have different pricing and/or conditions from those for a standard market priced currency swap. If a central bank swap arrangement follows pricing and conditions of a regular market priced swap, it should be recorded as a financial derivative.

(b)during the life of the contract, for a forward-type contract, either party can be creditor or debtor, and it may change, whereas for an option-type contract, the buyer is always the creditor and the writer is always the debtor except for contracts with multiple payments in the premium leg such as credit default swaps;¹⁹ and

(c)at maturity, redemption is unconditional for forward-type contracts, whereas the buyer of the contract determines it for standard call and put option contracts.

Option-type contracts

5.86 *In an option-type contract (option), the purchaser acquires from the seller a right to buy or sell (depending on whether the option is a call (buy) or a put (sell)) a specified underlying item at a strike price on or before a specified date. The purchaser of an option pays a premium to the writer of the option. In return, the buyer acquires the right but not the obligation to buy (call option) or sell (put option) a specified underlying item (real or financial) at an agreed-on contract price (the strike price) on or before a specified date. (On a derivatives exchange, the exchange itself may act as the counterparty to each contract.)*

5.87 Warrants are a form of financial derivative option giving the owner the right but not the obligation to purchase from or sell to the issuer of the warrant a fixed amount of an underlying asset, such as equities and bonds, at an agreed contract price for a specified period of time or on a specified date. Although similar to other traded options, a distinguishing factor is that the exercise of the warrants can create new securities, thus diluting the capital of existing bond or shareholders, whereas traded options typically grant rights over assets that are already available. If

¹⁹ Credit default swaps are generally regarded as option-type contracts. However, either party of a credit default swap contract can be creditor or debtor.

attached to bonds (warrant-linked bonds) to allow for a lower coupon payment, the warrants are not treated as separate financial asset (see 5.83 (d)). Warrants also include covered warrants. A covered warrant is generally issued by a financial corporation and gives the holder the right, but not the obligation to buy or sell an underlying asset, at an agreed contract price for a specified period of time or on a specified date. A covered warrant allows the holder to buy or sell a variety of financial or non-financial items (e.g., equities, currencies, and commodities).

Forward-type contracts

5.88 *A forward-type contract (forward) is an unconditional contract by which two counterparties agree to exchange a specified quantity of an underlying item (financial or nonfinancial) at an agreed-on contract price (the strike price) on a specified date.* Forward-type contracts include futures and swaps (other than as discussed in paragraph 5.91). Forward-type contract is used as a term because the term “forward” is often used more narrowly in financial markets (often excluding swaps). Forward rate agreements and forward foreign exchange contracts are common types of forward-type contracts.

5.89 Futures are forward-type contracts traded on organized exchanges. The exchange facilitates trading by determining the standardized terms and conditions of the contract, acting as the counterparty to all trades, and requiring margin to be deposited and paid to mitigate against risk.

5.90 At the inception of a forward-type contract, risk exposures of equal market value are exchanged, so a contract typically has zero value at that time. As the price of the underlying item changes, the market value will change, although it may be restored to zero by periodic settlement during the life of the forward. Asset

and liability position of financial derivative contracts may switch except for those of standard option contracts.

Swap contracts

5.91 *A swap contract involves the counterparties exchanging, in accordance with prearranged terms, financial instruments or cash flows based on the reference prices of the underlying items.* Swap contracts classified as forward-type contracts include foreign exchange swaps, currency swaps, interest rate swaps, and cross-currency interest rate swaps. Under a swap contract, the obligations of each party may arise at different times, for example, an interest rate swap for which payments are quarterly for one party and annual for the other. In such cases, the quarterly amounts payable by one party prior to payment of the annual amount payable by the other party are recorded as transactions in the financial derivative contract. Other types of arrangements also called swaps but not meeting the definition above include gold swaps (see paragraphs 5.55 and 7.58 for a discussion of their treatment), central bank swap arrangements (see paragraphs 6.102–6.104), and credit default swaps (see paragraph 5.93).²⁰

5.92 For foreign currency financial derivative swap contracts, such as currency swaps, it is necessary to distinguish between a transaction in a financial derivative contract and transactions in the underlying currencies. At inception, the parties' exchange of the underlying financial instruments is usually classified under other investment. At the time of settlement, the difference in the values, as measured in the unit of account at the prevailing exchange rate, of the currencies swapped are allocated to a transaction in a financial derivative, with the values swapped recorded in the relevant other item (usually other investment).

²⁰ See paragraphs A2.XX-XX on the treatments of off-market swaps.

5.XX Foreign currency financial derivative contracts (e.g., foreign exchange swaps, currency swaps, and foreign exchange forwards) typically involve the exchange of principal (i.e., notional/nominal value) at maturity, but the amount of principal to be returned/delivered is not recorded as a liability on balance sheet. To capture these off-balance sheet items, scheduled payments and receipts of foreign currencies associated with these financial derivatives are to be compiled (see A7.43-A7.45).

Credit derivatives

5.93 *Credit derivatives are financial derivatives whose primary purpose is to trade credit risk.* They are designed for trading in loan and security default risk. In contrast, the financial derivatives described in the previous paragraphs are mainly related to market risk, which pertains to changes in the market prices of securities, commodities, interest, and exchange rates. Credit derivatives take the form of both forward-type (total return swaps) and option-type contracts (credit default swaps).²¹ Under a credit default swap, premiums are paid in return for a cash payment in the event of a default by the debtor of the underlying instrument. Like other financial derivatives, credit derivatives are frequently drawn up under standard master legal agreements and involve collateral and margining procedures, which allow for a means to make a market valuation.

Margins

5.94 *Margins are payments of cash or deposits of collateral that cover actual or potential obligations incurred.* The required provision of margin reflects market concern over counterparty risk and is standard in financial derivative markets, especially

²¹ Credit default swaps also have some characteristics for forward-type contracts (e.g., potential switch of the creditor-debtor positions for both parties).

futures and exchange-traded options. Ownership of the margin remains with the unit that deposited it. Margin payments in cash are classified as deposits (if they are liabilities of a deposit-taking corporation or included in broad money), loans, or other accounts receivable/payable.²² When a repayable margin deposit is made in a noncash asset (such as securities), no transaction is recorded because no change in economic ownership has occurred. 5.XX In organized exchanges and clearing houses, margins are increased or decreased as a result of settling profits/losses of the derivative contracts by marking them to market value often on a daily or intraday basis. They are recorded as an increase or decrease in deposits, loans, or other accounts receivable/payable with a corresponding entry in a decrease in financial derivative assets or liabilities. If the margin falls short of a required level (often called a maintenance margin), an additional margin must be posted to meet the requirement. This payment is not to settle a financial derivative contract and should not be recorded in financial derivatives.

These principles for the classification of margins also apply more generally to other cash collateral agreements, including margin calls relating to positions in other financial assets.

Supplementary detail

5.95 Financial derivatives can be further classified in many other ways. They include the following:

- 1) *By market risk categories*: foreign exchange risk, interest rate risk, equity and commodity price risks and credit risk or risks to other underlying instruments;

²² Some compilers may prefer to classify these margins within loans or other accounts receivable/ payable in order to reserve the term “deposits” to monetary aggregates.

2)By instrument: options, forwards and related instruments (i.e., futures), swaps, credit derivatives, employee stock options, and other instruments;

3)By trading venue and clearing status: exchange traded; over-the-counter (OTC) (with clearing); OTC (without clearing)

5.XX Particularly, the information from the classification by market risk category of the underlying instrument is often used to analyze financial markets and macroeconomy. Each market risk category has distinctive characteristics:

- (a) **Foreign exchange derivatives** involve the exchange of currencies in the forward market. They include all contracts involving exposure to more than one currency, whether in interest rates or exchange rates, and cover outright forwards, foreign exchange swaps, currency swaps (including cross-currency interest rate swaps) and currency options.
- (b) **Single currency interest rate derivatives** are restricted to those deals where all the legs are exposed to only one currency's interest rate. These are contracts related to an interest-bearing financial instrument whose cash flows are determined by referencing interest rates or another interest rate contract (e.g., an option on a futures contract to purchase a Treasury bill). They include forward rate agreements, single-currency interest rate swaps and interest rate options, including caps, floors, collars and corridors, but exclude contracts involving the exchange of currencies (e.g., cross-currency swaps and currency options) and other contracts whose predominant risk characteristic is foreign exchange risk.

- (c) **Equity derivatives** contracts have a return, or a portion of their return, linked to the price of a particular equity or to an index of equity prices.
- (d) **Commodity derivatives** are contracts that have a return, or a portion of their return, linked to the price or to a price index of a commodity such as a precious metal, petroleum, lumber or agricultural products.
- (e) **Credit derivatives** are contracts in which the payout is linked primarily to some measure of the creditworthiness of a particular reference asset. They specify an exchange of payments in which at least one of the two legs is determined by the performance of the reference asset. Payouts can be triggered by a number of events, including a default, a rating downgrade, or a stipulated change in the credit spread of the reference asset. Typical credit derivative instruments are credit default swaps, credit-spread forwards and options, credit event or default swaps and total return swaps.
- (f) **Other derivatives** are any other derivative contracts, which do not involve an exposure to foreign exchange, interest rate, equity, commodity or credit risk. They include inflation-indexed derivatives, volatility derivatives, dividend derivatives, weather derivatives, property derivatives or freight derivatives as well as any derivatives with a non-standard underlying item which are developed for a particular client.

5.XX In practice, however, individual derivatives may straddle more than one risk category. In such cases, derivatives that are simple combinations of exposures should be reported separately in terms of their individual components. Derivatives that cannot be readily broken down into separable risk components should be reported in only one risk category. The allocation of such products with multiple exposures should be determined by the underlying risk component that is most significant. However, if there is doubt about the correct classification of multiexposure derivatives, the allocation by risk component should be made according to the order of precedence adopted by the BIS: commodities, equities, foreign exchange, and single-currency interest rate, credit, and other.

Employee stock options

5.96 *Employee stock options are options to buy the equity of a company, offered to employees of the company as a form of remuneration.* In a few cases, the company that issues the option is a resident of a different economy from the employee (e.g., where the employer is a branch or subsidiary of the company to which the option relates). Employee stock options have similar pricing behavior to financial derivatives, but they have a different nature—including arrangements for the granting and vesting dates (in general, granted employee stock options are vested once the employee has fulfilled the conditions or the relevant time period)—and purpose (i.e., to motivate employees to contribute to increasing the value of the company, rather than to trade risk). If a stock option granted to employees can be traded on financial markets without restriction, it is classified as a financial derivative.

5.97 In some cases, stock options may be provided to suppliers of goods and services to the enterprise. Although these are not employees of the enterprise, for

convenience they are also recorded under employee stock options because their nature and motivation are similar. (Whereas the corresponding entry for stock options granted to employees is compensation of employees as discussed in paragraph 11.20, the corresponding entry for stock options granted to suppliers is the goods and services supplied.)

5.98 For transactions associated with the issue of employee stock options, see paragraph 8.41.

C. Classification by Maturity

5.103 The maturity of a debt instrument is classified as either short-term or long-term:

(a) *Short-term is defined as payable on demand or with a maturity of one year or less.*

(Payable on demand refers to a decision by the creditor; an instrument where the debtor can repay at any time may be short- or long-term.)

(b) *Long-term is defined as having a maturity of more than one year or with no stated maturity (other than on demand, which is included in short-term).*

This classification provides information on the liquidity dimensions of debt. Currency is included in short-term maturity. Because of the nature of the relationship between the parties, in the case in which the maturity is unknown, all intercompany lending (which is defined in paragraph 6.26) may be classified as long-term maturity by convention. Insurance technical reserves, pension entitlements, and provisions for calls under standardized guarantee can potentially be classified by the maturity; however, if data are not available, a convention that they are all long-term can be adopted. When securities contain an embedded option with a date on which or after

which the debt can be put (sold) back to the debtor by the creditor, the maturity is determined without reference to these embedded put options. Financial derivatives could also potentially be classified according to maturity.

5.104 Maturity may relate to:

(a) original maturity (i.e., the period from issue until the final contractually scheduled payment); or

(b) remaining maturity (i.e., the period from the reference date until the final contractually scheduled payment²³). This is also called residual maturity.

In this *Manual*, original maturity is used in the standard components, while remaining maturity is used in Table A14-IV of Appendix 14 and is encouraged for some position data. Remaining-maturity measures provide an indication of when payments will fall due, and so of potential liquidity risks facing the economy. Particularly important is information on payments coming due in the near term.²⁴ The remaining maturity breakdown is recommended in this *Manual* for outstanding debt liabilities to nonresidents by sector and instrument (see Table A14-IV of Appendix 14). It is encouraged to include the currency composition in Table A14-IV (in a similar way to Tables A14-I) given that obligations in foreign and domestic currencies can impact an economy in different ways.

5.105 Data on both original and remaining maturity bases are accommodated by using the following split:

²³ For debt instruments repaid in installments, until the contractual dates of payments of individual payments.

²⁴ See paragraph 6.6 of the External Debt Statistics Guide for Compilers and Users.

- (a) short-term on an original maturity basis;
- (b) long-term on an original maturity basis, but due for payment within one year or less; and
- (c) long-term on an original maturity basis, and due for payment in more than one year.

Item (b) can be combined with item (a) to derive liabilities due within a year, that is, short-term debt on a remaining maturity basis.

5.XX This suggests that the measure of remaining maturity should split payments of a debt instrument that will fall due in the coming year from those that will fall due in more than one year. At the reference date, the present value of outstanding long-term external debt (original maturity) due to be paid in one year or less is the discounted value of payments to be made in the coming year, for both coupon and principal. To discount the value of payments, the contractual interest rate and the market interest rate should be used for loans and debt securities, respectively. When this approach raises practical difficulties in making the short- and long-term split, one alternative that might be used for analysis is the use of the undiscounted value of principal payments. This alternative measure is incomplete in its coverage of coupon payments but can be compiled using the principals for projecting payments in a debt-service schedule.

BOX 5.1 Example of Calculating Remaining Maturity

The simple example below sets out the recording for the remaining maturity classification of a loan attributed (i) to the debt payments on a discounted basis, (ii) to debt payments of the principal amount undiscounted, and (iii) to the final scheduled payment of the instrument. Consider a \$200 loan issued at t with two scheduled repayments of \$100 at $t+1$ (within one year) and $t+2$ (more than one year); the contractual coupon rate of the loan is 5 percent a year (interest accrued during the year is paid at the end of the year).

| Debt-service payment schedule of the loan | Principal payments | Interest payments | Loan outstanding position | <i>Present value of principal and interest payments as of end-Dec. 2025</i> |
|---|--------------------|-------------------|---------------------------|---|
| End-Dec 2025 | | | 200 | 200 |
| End-Dec 2026 | 100 | 10 | 100 | 105 |
| End-Dec 2027 | 100 | 5 | 0 | 95 |

| As of end-Dec 2025 | Classification based on scheduled payments of the loan | | Classification based on the final scheduled payment of the loan |
|-------------------------------|--|---|---|
| | Discounted value of principal and interest payments | Proxy measure based on the undiscounted value of principal payments | |
| Short-term remaining maturity | 105 | 100 | 0 |
| Long-term remaining maturity | 95 | 100 | 200 |

In this example, as of end-December 2025 (the reference date), the classification based on the debt service payments of the loan provides the appropriate information for liquidity analysis. In this case, the loan would be split into two buckets, one short-term and one long-term based on the due dates for principal and interest payments. Two slightly different remaining maturity values are shown under the classification based on payments of the loan. The first calculation shows the discounted value of payments to be made in the coming year (short-term) and in more than one year (long-term), both interest and principal using the contractual rate of the loan for this calculation. And, the second calculation shows a simpler proxy measure based on the undiscounted value of principal payments due in one year or less (short-term) and in more than one year (one-term).

D. Classification by Currency

5.106 A financial asset or liability may be classified as domestic currency or foreign currency, according to its unit of account, denomination, or settlement. These terms are discussed in paragraphs 3.95–3.97.

5.107 Table A14-I of Appendix 14 provides a format for presenting the currency composition of outstanding debt claims and liabilities using the currency of denomination. In recognition that for some sectors, such as nonfinancial corporations and households, there may be difficulties in obtaining comprehensive data from reporters, the table includes an “unallocated” row. This table includes a currency breakdown of reserve assets into currencies held that are in the SDR basket and those that are not. In Table A14-I of Appendix 14, by convention, SDR holdings, reserve position in the IMF, and monetary gold are to be classified as reserve assets in the SDR basket.

5.108 Table A14-I of Appendix 14 also includes forward-type financial derivatives of all resident sectors with nonresidents to receive and to pay foreign currency (e.g. foreign exchange forwards, foreign exchange swaps and currency swaps). A forward-type financial derivatives contract to purchase foreign currency with domestic currency is classified as a financial derivative to receive foreign currency. If instead the contract is to purchase domestic currency with foreign currency at a future date, this is a financial derivative to pay foreign currency. Currency compositions in forward-type contracts compiled in Table A14-I as memorandum items.

Similarly, an option to buy foreign currency (sell domestic currency) is classified as a financial derivative to receive foreign currency, and vice versa. Currency compositions in option-type contracts are compiled in Table A14-III as supplementary items.²⁵

The decisive factor in determining whether the financial derivative is to be classified as to receive or to pay foreign currency is the exposure to currency movements. Thus, if payment of a financial derivatives contract is linked to a foreign currency, even though payment is required in domestic currency, the financial derivative is to be classified as a contract to pay foreign currency, and vice versa. If a single financial derivatives contract both pays and receives foreign currency, the notional amount should be included under both categories (i.e., to pay and to receive foreign currency).²⁶

²⁵ The premium leg for CDS is predetermined and should be included in the memorandum tables along with the notional values of forward-type contracts.²⁶ Paragraph 5.95 provides further detail on the classification of financial derivatives contracts by risk categories when there is doubt about the correct classification of multiexposure derivatives.

²⁶ Paragraph 5.95 provides further detail on the classification of financial derivatives contracts by risk categories when there is doubt about the correct classification of multiexposure derivatives.

E. Classification by Type of Interest Rate

5.109 *Debt instruments may be classified as either variable-rate or fixed-rate.* This breakdown may be useful for some analysis, in that variable-rate instruments are subject to fluctuation in income flows in response to changes in market conditions, while fixed-rate securities are more subject to changes in prices. The split may be considered as possible supplementary information, as in *External Debt Statistics: Guide for Compilers and Users*.

5.110 Variable-rate debt instruments are those for which coupon (and therefore interest) is linked to a reference index—for example, the Secured Overnight Financing Rate (SOFR), or the price of a specific commodity, or the price of a specific financial instrument that normally changes over time in a continuous manner in response to market conditions. All other debt instruments should be classified as fixed-rate. An coupon rate that is adjusted, but only at intervals of more than a year, is considered to be fixed. Coupon that is adjusted each one year or less is considered to be variable.

5.111 Coupon on debt that is linked to the credit rating of another borrower should be classified as fixed-rate, because credit ratings do not change in a continuous manner in response to market conditions, whereas coupon on debt that is linked to a reference price index should be classified as variable-rate, provided that the prices that are the basis for the reference index are primarily market determined.

5.112 The classification of a financial asset or liability can change over time, for example, if it switches from fixed- to variable-rate. In the period when a fixed rate is applied, the financial asset or liability is to be classified as fixed-rate debt. After the rate switches to variable, it is classified as variable-rate debt.

5.113 Index-linked instruments are classified as being variable-rate. For these instruments, the principal or coupons or both are indexed to some variable, for example, to a general or specific price index. Because index-linked instruments have variable aspects, an instrument is classified as variable-rate if the indexation applies to the principal or coupons, or both (notwithstanding the treatment of interest discussed in paragraphs 11.59–11.65). However, a foreign-currency-linked instrument (as discussed in paragraph 11.50(b)) is treated as being denominated in the foreign currency, rather than indexed to it.

5.114 If coupons are linked to a reference index, commodity price, or financial instrument price but is fixed unless the reference index or price passes a particular threshold, it should be regarded as fixed-rate. But if thereafter the coupon becomes variable, then it should be reclassified as a variable-rate instrument. Alternatively, if coupon is variable-rate until it reaches a predetermined ceiling or floor, the instrument becomes fixed-rate debt when that ceiling or floor is reached. If the payment stream of a variable-rate instrument is swapped with the payment stream of a fixed-rate instrument, the swap is recorded as giving rise to a financial derivative, while the classification of the original debt instruments is unchanged.

F. Arrears

5.99 An additional subclassification can be made for instruments in arrears. *Arrears are defined as amounts that are both unpaid and past the due date for payment.* Only the amounts past due are classified as arrears—for example, in the case of overdue installments, only the overdue part is in arrears.

5.100 Arrears related to exceptional financing are shown as memorandum items in all cases. (Exceptional financing is defined and discussed in Appendix 1.)

5.101 Arrears not related to exceptional financing may be recorded as a supplementary category in total and under the specific financial asset or liability class affected. Separate data on arrears may be of analytical interest when there is evidence of a high or rapidly rising value of arrears. Measures of other aspects of impairment of loans and other financial claims are discussed in paragraphs 7.45–7.54.

5.102 Arrears may be associated with either (a) re-classification of an existing instrument when a change in terms is triggered by the provisions of the original contract, or a change of the nature of the claim when the settlement of a financial derivative becomes overdue (see paragraph 5.82); or (b) the creation of a new instrument as a result of renegotiated terms (also discussed in paragraph 8.58). In either case, amounts not paid when due should be included in arrears. A liability ceases to be in arrears if all overdue payments are met. The accrual treatment of arrears is discussed in paragraphs 3.56–3.57.

Chapter 6. Functional Categories in External Accounts

Chapter 6 Functional Categories in External Accounts

A. Introduction

6.1 The functional categories¹ are the primary classification used for each of financial transactions, positions, and income in the international accounts. Five functional categories of investment are distinguished in the external accounts:

(a) direct investment,

(b) portfolio investment,

(c) financial derivatives (other than reserves) and employee stock options,

(d) other investment, and

(e) reserve assets.

6.2 The functional categories are built on the classification of financial assets and liabilities discussed in Chapter 5, but with an additional dimension that takes into account some aspects of the relationship between the parties and the motivation for investment. The functional categories are designed to facilitate analysis by distinguishing categories that exhibit different economic motivations and patterns of behavior.

¹The term functional classification is also used in different contexts in other areas of statistics, such as the classification of the functions of government.

6.3 While linked to the classification of financial assets and liabilities, the functional categories highlight features that are particularly relevant for understanding cross-border financial flows and positions. For example, a loan can appear under direct investment or other investment, but the different nature of the relationship between the parties in these two cases has analytical significance because the risks and motivations behind the transaction may be different.

6.4 A different relationship exists between the counterparties for portfolio investors compared with direct investors. Direct investment is related to control or a significant degree of influence² and tends to be associated with a lasting relationship. As well as funds, direct investors may supply additional contributions such as know-how, technology, management, and marketing. Furthermore, enterprises in a direct investment relationship are more likely to trade with and finance each other.

6.5 In contrast to direct investors, portfolio investors typically have less of a role in the decision making of the enterprise with potentially important implications for future flows and for the volatility of the price and volume of positions. Portfolio investment differs from other investment in that it provides a direct way to access financial markets, and thus it can provide liquidity and flexibility. It is associated with financial markets and with their specialized service providers, such as exchanges, dealers, and regulators. The nature of financial derivatives as instruments through which risk is traded in its own right in financial markets sets them apart from other types of investment. Whereas other instruments may also have risk transfer elements, these other instruments also provide financial or other resources.

² In the context of direct investment, the terms "significant degree of influence" and "influence" have the same intent and are used interchangeably.

6.6 Reserve assets are shown separately because they serve a different function and thus are managed in different ways from other assets. Reserve assets include a range of instruments that are shown under other categories when not owned by monetary authorities. As reserve assets, however, they have the distinct motive to meet balance of payments financing needs and undertake market intervention to influence the exchange rate.

6.7 Monetary and financial statistics and flow of funds data primarily use the instruments classification, as shown in Chapter 5, so it is desirable that data on the same basis can be derived from the external accounts for compatibility. Table 6.1 shows the linkages between the financial assets classification shown in Chapter 5 and the functional categories shown in this chapter.

| Table 6.1. Link between Financial Assets Classification and Functional Categories | | | | | |
|---|-----------------------|----|----|----------------|----------------|
| 2025 SNA Financial Assets and Liabilities Classification | Functional categories | | | | |
| | DI | PI | FD | OI | RA |
| AF1 Monetary gold and SDRs | | | | | |
| AF11 Monetary gold | | | | | |
| Gold bullion | | | | | X |
| Unallocated gold accounts | | | | | X |
| AF12 special drawing rights | | | | X ¹ | X ¹ |
| AF2 Currency and deposits | | | | | |
| AF21 currency | | | | X | X |
| AF22 transferable deposits | | | | | |
| AF221 interbank positions | | | | X | X |
| AF229 other transferable deposits | X | | | X | X |
| AF29 other deposits | X | | | X | X |
| AF3 Debt securities | X | X | | | X |
| AF4 Loans | X | | | X | X |
| AF5 Equity and investment fund shares | | | | | |
| AF51 Equity | | | | | |
| AF511 listed shares | X | X | | | X |
| AF512 unlisted shares | X | X | | | x ² |
| AF519 other equity and equity in international organizations | X | | | X | |
| AF52 Investment fund shares/units | | | | | |
| AF521 money market fund shares/units | | X | | | X |
| AF522 other investment fund shares/units | | X | | x | X |
| AF6 Insurance, pension, and stand. guarantee schemes | | | | | |

| | | | |
|--|---|---|---|
| AF61 nonlife insurance technical reserves | x | | X |
| AF62 life insurance and annuity entitlements | x | | X |
| AF63 pension entitlements | | | X |
| AF64 claims of pension funds on pension managers | X | | X |
| AF65 entitlements to nonpension benefits | | | X |
| AF66 provisions for calls under standardized guarantees | X | | X |
| AF7 Financial derivatives and employee stock options | | | |
| AF71 Financial derivatives | | | |
| AF711 forward-type contracts | | X | X |
| AF712 options | | X | X |
| AF72 employee stock options | | X | |
| AF8 Other accounts receivable/payable | | | |
| AF81 trade credit and advances | X | | X |
| AF89 other accounts receivable/payable | X | | X |
| <p>Note: DI—direct investment; PI—portfolio investment; FD—financial derivatives (other than reserves) and employee stock options; OI—other investment; RA— reserve assets. X shows applicable functional categories (x shows cases considered to be relatively uncommon) for the most detailed instrument categories.</p> <p>¹SDRS: assets = reserve assets; liabilities = other investment.</p> <p>²unlisted shares must be liquid, as stated in paragraph 6.87.</p> | | | |

B. Direct Investment

References:

Organization for Economic Cooperation and Development (OECD), *OECD*

Benchmark Definition of Foreign Direct Investment, fifth edition.

IMF, *Coordinated Direct Investment Survey Guide*.

1. Definition of direct investment

6.8 *Direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. As well as the equity that gives rise to control or influence, direct investment also includes investment associated with that relationship, including investment in indirectly influenced or controlled enterprises (paragraph 6.12), investment in fellow enterprises (see paragraph 6.17), debt (except selected debt set out in paragraph 6.28), and reverse investment (see paragraph 6.40). The Framework for Direct Investment Relationships (FDIR) provides criteria for determining whether cross-border ownership results in a direct investment relationship, based on control and influence.³ The definition of direct investment is the same as in the fifth edition of the *OECD Benchmark Definition of Foreign Direct Investment*, which provides additional details on the FDIR and the collection of direct investment data. Annex 6, Selected Issues on Direct Investment, provides an overview of direct investment by pulling together relevant information from the main*

³The coverage of direct investment is determined from the relationship between the owner and issuer of the financial instrument. That is, it is not determined from the relationship between the buyer and the seller of the instrument. For example, if a direct investor buys shares in its direct investment enterprise from an unrelated party, the direct investor will classify the purchase as direct investment. As the seller of the shares classifies the sale under portfolio investment, this recording may result in bilateral asymmetry.

part of the *Manual* and also presents more details on specific issues pertaining to direct investment.

a. Definition of a direct investment relationship

6.9 *A direct investment relationship arises when an investor resident in one economy makes an investment that gives control or a significant degree of influence on the management of an enterprise that is resident in another economy.* Operational definitions of control and influence are given in **paragraph 6.12**. Enterprises in a direct investment relationship with each other are called affiliates or affiliated enterprises. In addition, all enterprises that are under the control or influence of the same direct investor are considered to be in a direct investment relationship with each other.

6.10 Because there is control or a significant degree of influence, direct investment tends to have different motivations and to behave in different ways from other forms of investment. As well as equity (which is typically associated with voting power), the direct investor may also supply other types of finance, as well as know-how. Direct investment tends to involve a lasting relationship, although it may be a short-term relationship in some cases. Another feature of direct investment is that decisions by enterprises may be made for the group as a whole.

b. Definitions of direct investor and direct investment enterprise

6.11 *A direct investor is an entity or group of related entities that is able to exercise control or a significant degree of influence over another entity that is resident of a different economy. A direct investment enterprise is an entity subject to control or a significant*

*degree of influence by a direct investor.*⁴ In some cases, a single entity may be, at the same time, a direct investor, a direct investment enterprise, and a fellow enterprise (defined in **paragraph 6.17(c)**) in its relationships to other enterprises.

c. Definitions of control and influence—definitions of immediate and indirect relationships

6.12 Control or influence may be achieved directly by owning equity that gives voting power in the enterprise, or indirectly by having voting power in another enterprise that has voting power in the enterprise. Accordingly, two ways of having control or influence are identified:

(a) **Immediate direct investment relationships** arise when a direct investor directly owns equity that entitles it to **10 percent or more** of the voting power in the direct investment enterprise.

- Control is determined to exist if the direct investor owns more than 50 percent of the voting power in the direct investment enterprise.
- A significant degree of influence is determined to exist if the direct investor owns from 10 to 50 percent of the voting power in the direct investment enterprise.

(b) **Indirect direct investment relationships** arise through the ownership of voting power in one direct investment enterprise that owns voting power in another enterprise or enterprises, that is, an entity is able to exercise indirect control or influence through a chain of direct investment relationships. For example, an enterprise may have an immediate direct investment relationship with a second enterprise that has an

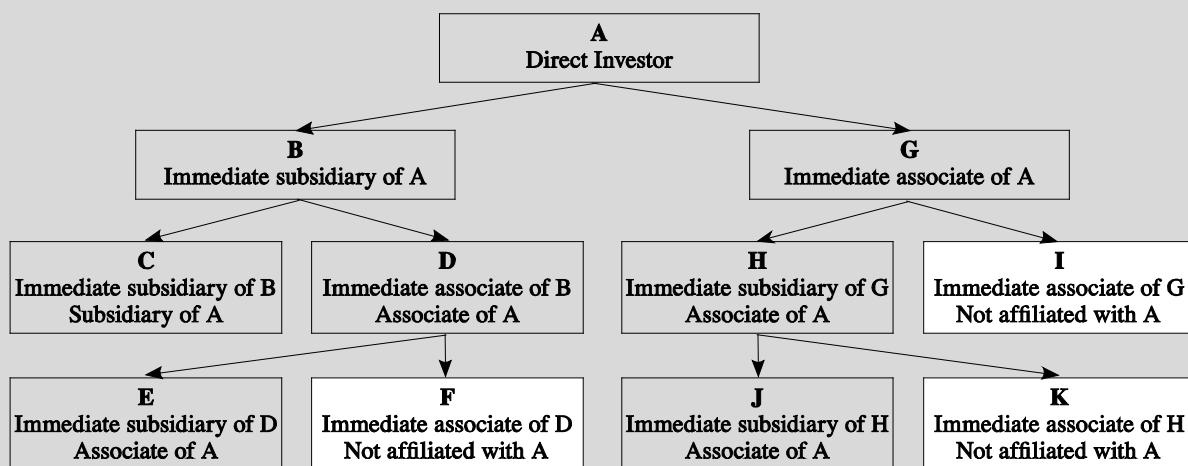
⁴ An exception is investment funds, which cannot be direct investment enterprises as investments in negotiable investment funds shares are always considered to be portfolio investment. Shares in investment funds are included in other equity and equity in international organizations under other investment when they are not negotiable.

immediate direct investment relationship with a third enterprise. Although the first enterprise has no equity in the third enterprise, it may be able to exercise indirect control or influence, according to the FDIR criteria specified in [paragraph 6.14](#).

In addition to direct investment relationships between two enterprises that arise because one enterprise controls or influences the other, there are also direct investment relationships between two enterprises that do not control or influence each other, but that are both under the control or influence of the same investor (i.e., fellow enterprises, as discussed in [paragraph 6.17](#)).

6.13 In practice, effective control or influence may arise in some cases with less than these percentages. These definitions should be used in all cases, however, for international consistency and to avoid subjective judgments.

Box 6.1. Examples of Identification of Direct Investment Relationships under FDIR



Each enterprise is resident in a different economy from the others. Shaded boxes are direct investment enterprises of the Direct Investor A (so all are affiliates of each other).

For further examples, see the *OECD Benchmark Definition of Foreign Direct Investment*. In particular, it considers more complex situations, such as where an enterprise receives investment from two members of the same group.

Note: See paragraph 6.15 for the definitions of subsidiary and associate.

6.14 The principles for indirect transmission of control and influence through a chain of ownership for the purposes of [paragraph 6.12\(b\)](#) are as follows:

- (a) Control can be passed down a chain of ownership as long as control exists at each stage.
- (b) Influence can be generated at any point down a chain of control.
- (c) Influence can be passed only through a chain of control but not beyond.

Whereas the FDIR applies a criterion of 10 percent or more of voting power for immediate direct investment, transmission through chains of ownership is not linked to a particular equity share, but a chain of control. For example, a chain of ownership of enterprises with each link involving 60 percent of the voting power involves a chain of control, even though the indirect equity by the top enterprise is 36 percent at the second level (i.e., 60 percent of 60 percent), 21.6 percent at the third level (i.e., 60 percent of 36 percent), and so on. The application of these principles may be understood more readily from Box 6.1 and by numerical examples in the *OECD Benchmark Definition of Foreign Direct Investment*.

d. Definitions of subsidiaries, associates, fellow enterprises, and affiliates

6.15 In regard to its relationship with a direct investor, a direct investment enterprise is either a subsidiary or an associate:

- (a) *A subsidiary is a direct investment enterprise over which the direct investor is able to exercise control.*
- (b) *An associate is a direct investment enterprise over which the direct investor is able to exercise a significant degree of influence, but not control.*

Control and influence are defined in paragraph 6.12 and may arise from an immediate relationship or in indirect relationship through a chain of ownership. The terms subsidiary and associate refer to both incorporated and unincorporated enterprises. The FDIR makes no distinction on the basis of incorporation, so directly owned branches (see paragraph 4.xx) are always treated as subsidiaries.

6.16 Under the FDIR, an entity is a direct investor in another entity where the second entity is

- (a) an immediate subsidiary of the direct investor;
- (b) an immediate associate of the direct investor;
- (c) a subsidiary of a subsidiary of the direct investor (also considered to be an indirect subsidiary of the direct investor);
- (d) a subsidiary of an associate of the direct investor (also considered to be an indirect associate of the direct investor); or
- (e) an associate of a subsidiary of the direct investor (also considered to be an indirect associate of the direct investor).

However, no direct investor–direct investment enterprise relationship exists in cases in which the entity is an associate of an associate of the direct investor. In this case, the ability of the investor to influence the management of the entity is considered to have become too diluted to be significant.

(These principles are illustrated in Box 6.1.)

6.17 Affiliates of an enterprise consist of:

- (a) *its direct investor(s), both immediate and indirect;*

- (b) *its direct investment enterprises, whether subsidiaries (including branches and other quasi-corporations), associates, or subsidiaries of associates, both immediate and indirect; and*
- (c) **fellow enterprises**, *that is, those enterprises that are under the control or influence of the same immediate or indirect investor, but neither of the enterprise controls or influences the other enterprise. Often the direct investor and fellow enterprises are all in different economies, but sometimes the direct investor is in the same economy as one of the fellow enterprises (in which case, it is not a direct investor in that fellow enterprise). This situation is more likely to arise in economies that do not use a local enterprise group as the statistical unit for direct investment purposes.*

All affiliates are in a direct investment relationship with each other. The term affiliated enterprises is also used, because affiliates are almost always enterprises (the exception is a direct investor that is an individual, household, or government).

6.18 Some practical difficulties may be encountered in applying the FDIR in full, and thus similar methods—such as the participation multiplication method and the direct influence and indirect control method—may be adopted. For details, see *OECD Benchmark Definition of Foreign Direct Investment* and the IMF's *Coordinated Direct Investment Survey Guide*.

e. Requirements for a direct investment relationship

6.19 Voting power is obtained as a result of ownership of equity. When decisions are made on a one-share one-vote basis, voting power is in the same proportion as the ownership of ordinary shares. In some cases, voting power can be exercised without commensurate ownership of shares. For instance, for unincorporated entities, including foundations, there are no shares in the sense of a

tradable instrument.⁵ Additionally, voting power may be greater or less than percentage of shares held when there are “golden shares” or dual classes of shares (i.e., in cases in which nonvoting shares or some shares have higher weights that allow one or more parties to exercise voting power disproportionately to their share ownership). However, voting power is not recognized if temporarily obtained through repurchase agreements (because no change in the economic ownership of the shares has occurred) or through the holding of warrants (because the warrant holder does not possess voting power until the warrants are exercised). In addition, as elaborated in the FDIR, one entity may obtain voting power indirectly in an enterprise by owning shares in an intermediate entity or through chains of intermediate entities that, in turn, own shares in the enterprise.

6.20 A direct investor could be:

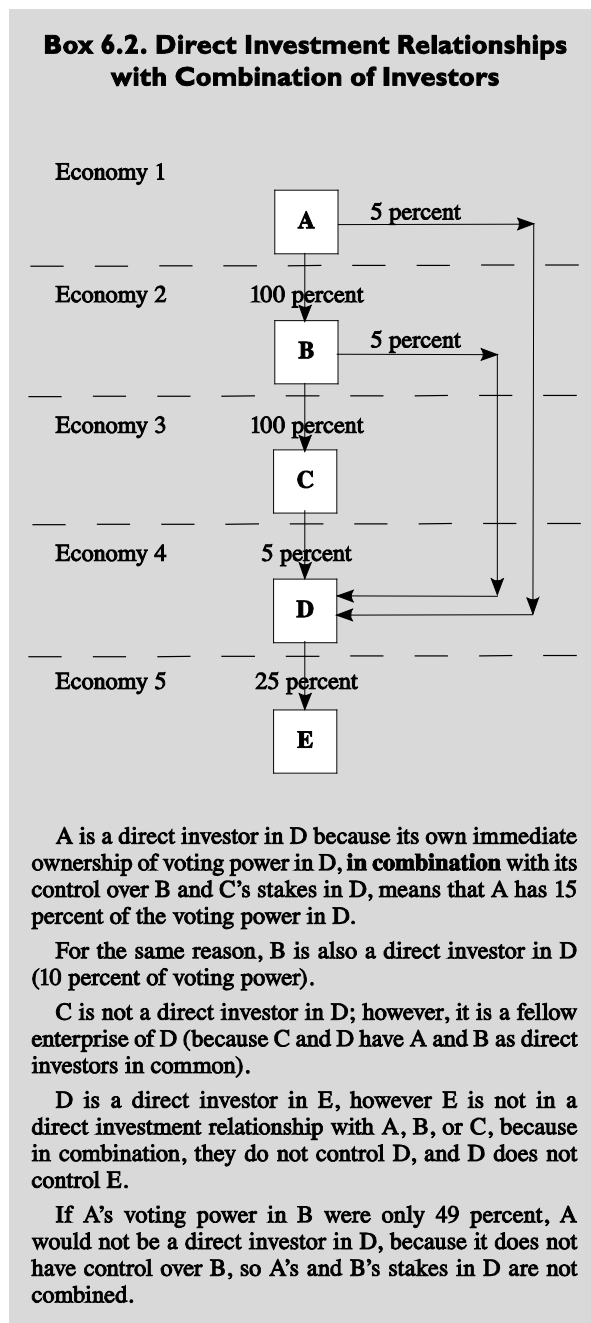
- (a) an individual or household;
- (b) an enterprise, incorporated or unincorporated, public or private;
- (c) an investment fund;
- (d) a government, central bank, or international organization. Special treatments for governments that have direct investment enterprises for fiscal purposes are discussed in paragraphs 8.24–8.26;
- (e) a nonprofit institution investing in an enterprise that operates for profit; however, the relationship between two nonprofit institutions is excluded from direct investment;
- (f) an estate, trustee in bankruptcy, or other trust; or

⁵ Voting power is typically assigned based on governance structures such as bylaws, partnership agreements, or trust deeds.

(g) any combination of two or more of the above.

6.21 For two or more individuals or other entities to be considered a combination, and thus be regarded as a single direct investor, they must be in a direct investment relationship or have a family relationship (in the case of individuals). The different individuals or other entities must be resident in the same economy as each other. They cannot include any investor that is a resident of the same economy as the direct investment enterprise. Equity ownership in an enterprise held by a group of related investors acting in combination can be summed to establish either control or influence. However, equity held by an associate is not summed with that from any other enterprise to establish either control or influence because influence is not able to be passed unless there is control of the next affiliate

(this concept is illustrated in **Box 6.2**). [Annex 4, *BD4*] also provides further elaboration and examples on entities under direct investment relationship.



6.22 A government may be a direct investor. Special treatments of positions and transactions apply when a government has a direct investment enterprise that is used for fiscal purposes, discussed further in **paragraphs 8.24–8.26**. If a

government equity holding could qualify as both direct investment and reserve assets, it is included in direct investment, whereas debt instruments are classified as reserve assets provided that the reserve asset criteria are met (see also paragraph 6.98).

6.23 A nonprofit institution may not be a direct investment enterprise, as it is not created with the intention of repatriating earnings to its investor. However, a nonprofit institution may be a direct investor in a for-profit entity.

6.24 A direct investment enterprise is always a corporation (which as a statistical term includes branches, notional resident units, trusts, other quasi-corporations, as well as incorporated entities) with the following exceptions. Regarding central banks and NPISHs, they can be direct investors, but can't be direct investment enterprises as they are not created with the intention of repatriating earnings to their investors.⁶ Likewise, investment funds (MMF and non-MMF) can be director investors, but they cannot be direct investment enterprises as investments in investment funds shares are always considered to be portfolio investment or other investment. Because a direct investment enterprise is owned by another entity, households or governments can be direct investors, but they cannot be direct investment enterprises. A public corporation, as defined in paragraphs 4.108–4.112, in some instances also may be a direct investment enterprise.

⁶ Most of the central banks share their surpluses with respective governments although their intention is not to generate profits unlike other entities in the financial corporations sector, which are market producers.

2. Coverage of direct investment as a functional category

6.25 Direct investment covers most financial transactions and positions between affiliates resident in different economies. Investment income associated with direct investment positions is also included in direct investment. The exceptions are noted in paragraphs 6.28–6.29 and 6.32. Issues associated with investment income on direct investment equity and debt instruments are covered in paragraphs 12.xx-xx.

a. Coverage of debt between affiliates

Definition of intercompany lending

6.26 *Intercompany lending is used to describe direct investment debt positions between affiliated enterprises.* It includes debt instrument transactions and positions other than those excluded by paragraph 6.28; it is not limited to loans. As shown in Tables I and III in Appendix 14, Standard Components and Selected Other Items, and *External Debt Statistics: Guide for Compilers and Users*, intercompany lending is identified separately from other debt for debt analysis, because this lending has different implications for risk and vulnerability compared with debt between unrelated parties. Splits of intercompany lending by type of instrument and maturity are supplementary items that allow comparability with national accounts and financial statistics.

6.27 Although debt and other financial claims that do not involve voting power are not relevant to defining a direct investment relationship, they are included in direct investment transactions and positions if a direct investment relationship exists between the parties. Debt instruments other than monetary gold, SDRs, currency,

interbank positions, and pension and related entitlements potentially can be included in direct investment. However, transactions between affiliates in financial assets issued by an unrelated third party are not direct investment transactions. Insurance technical reserves are included in direct investment when the parties are in a direct investment relationship. For example, reserves may arise from reinsurance contracts between affiliated insurance corporations. They also arise with captive direct insurance. (A captive insurance company writes insurance policies largely or entirely with its owners and other affiliates.)

Coverage of debt between selected affiliated financial corporations

6.28 Debt between selected affiliated financial corporations is not classified as direct investment because it is not considered to be so strongly connected to the direct investment relationship. The financial corporations covered by this case are:

- (a) deposit-taking corporations (both central banks and deposit-taking corporations other than the central bank);
- (b) investment funds; and
- (c) other financial intermediaries except insurance corporations and pension funds.

In other words, the usual direct investment definitions apply for captive financial institutions and money lenders, insurance corporations, pension funds, and financial auxiliaries. (These subsectors are defined in **Chapter 4, Section D**; debt instruments are defined in **paragraphs 5.31–5.33**.) All debt positions between the selected types of affiliated financial corporations are excluded from direct investment and are included under portfolio (e.g., debt securities) or other investment (e.g., loans, deposits). Both affiliated parties must be one of the selected types of financial

corporations, but they need not be the same type. Table 6.2 summarizes the functional category of debt between affiliated enterprises.

Table 6.2. Functional Category of Debt Between Affiliated Enterprises

| | | Liabilities | | | |
|---|---|---|------------------------------|---|----------------------------|
| | | Deposit-taking corporations (S121/S122) | Investment funds (S123/S124) | Other financial intermediaries except insurance corporations and pension funds (S125) | Other sectors ¹ |
| Assets | Deposit-taking corporations (S121/S122) | OI (or PI) | OI (or PI) | OI (or PI) | DI |
| | Investment funds (S123/S124) | OI (or PI) | OI (or PI) | OI (or PI) | DI |
| | Other financial intermediaries except insurance corporations and pension funds (S125) | OI (or PI) | OI (or PI) | OI (or PI) | DI |
| | Other sectors ¹ | DI | DI | DI | DI |
| <p>Note: DI—direct investment; PI—portfolio investment; OI—other investment</p> <p>¹ Include General Government (S13), Other financial institutions (S126/S127/S128/S129), Non-financial corporations (S11) and households and Non-profit Institutions Serving Households (S14/S15).</p> | | | | | |

b. Coverage of other financial instruments

6.29 Financial derivatives and employee stock options are excluded from direct investment and included in the functional category financial derivatives (other than reserves) and employee stock options.

6.31 Direct investment may include real estate investment, including investment properties and vacation homes. As discussed in paragraphs 4.26–4.40, branches or notional units are identified when nonresidents own real estate and other natural resources. The normal ownership threshold for influence or control under the FDIR is applied. Because it may have different motivations and economic impact from other direct investment, if real estate investment is significant, compilers may wish to publish data on such investment separately on a supplementary basis.

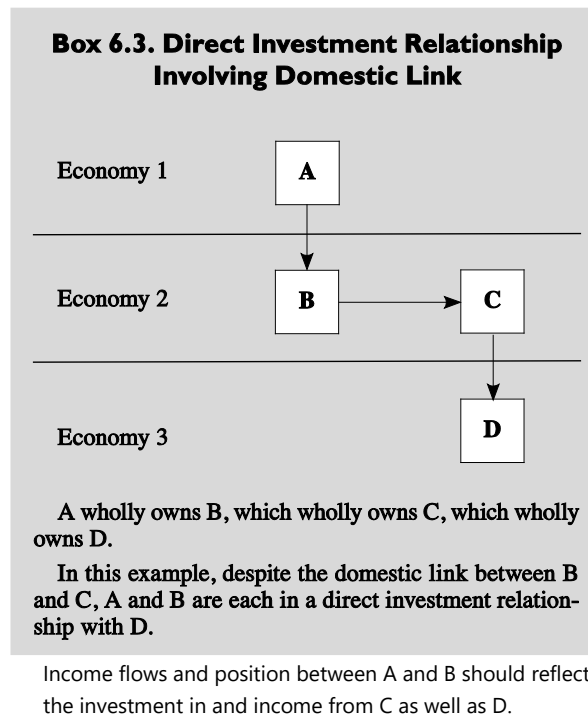
6.32 Equity in international organizations is excluded from direct investment, even in cases in which voting power is 10 percent or more, and included in other investment—other equity and equity in international organizations.. Equity in international organizations would not generally qualify as reserve assets because of the lack of ready availability (see paragraph 6.69).

c. Pass-through funds

6.33 *“Pass-through funds” or “funds in transit” are funds that pass through a direct investment enterprise resident in an economy to an affiliate in another economy, so that the funds do not stay in the economy of the first enterprise.* Such flows have little impact on the economy they pass through. Special purpose entities, holding companies, and financial institutions that serve other nonfinancial affiliates are particularly associated with funds in transit, but other enterprises may also have

pass-through funds in direct investment flows. Identifying these flows in practice is complicated.

6.34 Pass-through funds are included in direct investment in standard presentations because:



- (a) they are an integral part of a direct investor's financial transactions and positions with affiliated enterprises;
- (b) the exclusion of these funds from direct investment would distort and substantially understate direct investment financial flows and positions at aggregate levels; and
- (c) the inclusions of these data in direct investment promotes symmetry and consistency among economies.

However, for the economies through which the funds pass, it is useful to identify inflows and outflows not intended for use by the entity concerned. This

Manual recommends a supplemental framework for the statistics by ultimate investing economy (UIE), ultimate host economy (UHE), and pass-through funds. Primarily, the supplemental framework will be applied to the development of direct investment statistics by UIE and UHE that could be used in turn to derive aggregates on pass-through funds. Annex 6 and the *OECD Benchmark Definition of Foreign Direct Investment* provides detailed guidance on this supplemental framework.

d. Effect of domestic ownership links on direct investment relationships

6.35 To identify direct investment relationships, the FDIR does not exclude ownership links between enterprises resident in the same economy. Although any transactions and positions between enterprises in the same economy are not included in external accounts, it is possible that a direct investor may have a chain of control or influence in which one link in the chain is a resident-to-resident relationship. Such a relationship does not preclude a direct investment relationship between two enterprises that are resident in different economies from each other. (This case is illustrated in Box 6.3.)

e. Beginning and ending direct investment relationships

6.36 The whole of the transaction that reaches or surpasses the threshold of 10 percent or more of voting power is included under direct investment. Any transactions before that point are not generally classified as direct investment (with the exception of reverse investment—defined in paragraph 6.37(b)—and investment in other affiliates). Any prior positions are shown as being reclassified at the time that the direct investment relationship comes into existence (reclassifications are discussed in paragraphs 9.13–9.20). For example, if the direct

investor previously had 9 percent of voting power, then acquired 2 percent more, there would be a direct investment transaction by the purchaser involving 2 percent of voting power, and the reclassification entries in the other changes in financial assets and liabilities account would show a reduction of portfolio investment involving the previously held 9 percent and a corresponding increase in direct investment. Subsequent transactions up to and including a transaction that takes the voting power below 10 percent are classified as direct investment. Once the direct investment equity threshold has been crossed (either upward or downward), any debt positions between the parties should also be changed by a reclassification entry in the other changes in volume account.

3. Types of direct investment transactions and positions

6.37 In the standard components, direct investment is classified according to the instruments (equity and debt instruments) and sectors (central bank; deposit-taking corporations except the central bank; general government; other financial corporations; nonfinancial corporations; and households and NPISHs).

6.37-1 The sectoral presentation of direct investment links with balance sheet and other sectoral data compiled in the system of national accounts (SNA), monetary and financial statistics (MFS), and government finance statistics (GFS), thus facilitating comparison with these datasets. Also, this presentation provides a convenient way to analyze the net foreign lending or borrowing of each resident sector. It also supports the Balance Sheet Approach (BSA) by providing details on the external positions for the resident sectors (see paragraphs 19.xx-xx for details on BSA).

6.37-2 The following items based on the relationship between the investor and the entity receiving the investment are included under memorandum items:

- (a) investment by a direct investor in its direct investment enterprise (whether in an immediate relationship or not);
- (b) reverse investment by a direct investment enterprise in its own immediate or indirect direct investor, as explained in paragraphs 6.39–6.40; and
- (c) investment between resident and nonresident fellow enterprises, as explained in paragraph 6.17, combining equity and debt investment

6.38 These three memorandum items reflect different types of relationships and motivations. For example, the interpretation of a direct investor acquiring direct investment assets is different from a direct investment enterprise acquiring direct investment assets. While the first type of investment involves influence or control, this may not be the case for the other two types, because the investor is not a direct investor. It is important for compilers to monitor trends in the second and third types to identify if they are becoming significant. It is also important to identify reverse investment and investment between fellows to be able to determine the net investment by nonresident direct investors in the economy and by resident direct investors abroad. Moreover, these memorandum items are necessary to derive the data under directional principle (see paragraphs 6.42-6.43 and Box 6.4).

6.38-1 In addition, reinvestment of earnings should be reported as a memorandum item in the balance of payments' financial account, which should be consistent with the standard component, reinvested earnings, recorded in the earned income account (see Annex 14 for details on the presentation of these items and supplementary items in balance of payments and IIP).

a. Reverse investment

6.39 A direct investment enterprise may acquire an equity or other financial claim on its own immediate or indirect direct investor. These transactions may occur as a way of withdrawing investment, or as a way of organizing finance within a transnational group. For example, for an enterprise that borrows on behalf of its parent company and in cases in which treasury functions are concentrated in a subsidiary (see paragraphs 4.83(d) and 4.86), the subsidiary may lend money to its direct investor.

6.40 *Reverse investment arises when a direct investment enterprise lends funds to or acquires equity in its immediate or indirect direct investor, provided it does not own equity comprising 10 percent or more of the voting power in that direct investor.* In contrast, if two enterprises each have 10 percent or more of the voting power in the other, there is not reverse investment, rather there are two mutual direct investment relationships. That is, each enterprise is both a direct investor and direct investment enterprise of the other.

6.41 Issues associated with investment income on direct investment equity and debt instruments are covered in paragraphs 12.xx-xx.

b. Presentation of data according to the directional principle

6.42 *The directional principle is a presentation of direct investment data organized according to the direction of the direct investment relationship.* It can be contrasted with the asset and liability presentation (discussed in paragraphs 6.37 and 6.37-2) of aggregates used in standard components and memorandum items in this *Manual*, which are organized according to whether the investment relates to an asset or

liability. It is clarified that the difference between the asset-liability and directional presentations arises from differences in the treatment of reverse investment and some investment between fellow enterprises. The directional principle can be applied to the IIP, financial account, and investment income. Under the directional principle, direct investment is shown as either direct investment abroad or direct investment in the reporting economy:

(a) *Direct investment abroad covers assets and liabilities between resident direct investors and their direct investment enterprises. It also covers assets and liabilities between resident and nonresident fellow enterprises if the ultimate controlling parent⁷ is resident.*

Direct investment abroad is also called outward direct investment.

(b) *Direct investment in the reporting economy includes all liabilities and assets between resident direct investment enterprises and their direct investors. It also covers assets and liabilities between resident and nonresident fellow enterprises if the ultimate controlling parent is nonresident.* Direct investment in the reporting economy is also called inward direct investment.

6.43 The treatment of fellow enterprises under the directional principle is as follows:

- In principle, all assets and liabilities between fellow enterprises are shown in direct investment abroad when the ultimate controlling parent is a resident. In that case, control and influence is exercised from the economy of the resident, so it is useful to view an investment in a fellow enterprise abroad as part of outward investment.

⁷ Entity that ultimately controls an enterprise, identified by proceeding up the ownership chain from the enterprise through the controlling links (ownership of more than 50 per cent of the voting power) until an individual, household, or company that is not controlled by another company is reached. If there is no company, individual, or household that controls the resident company, then the resident company may be considered to be its own ultimate controlling parent.

- In principle, all assets and liabilities between fellow enterprises are shown in direct investment in the reporting economy when the ultimate controlling parent is a nonresident. In this case, control and influence are exercised from another economy, so it is useful to view investment with the fellow enterprise abroad as part of inward investment.
- However, if the residence of the ultimate controlling parent is unknown, assets are treated as direct investment abroad and liabilities are treated as direct investment in the reporting economy. This treatment is allowed for practical reasons. It is recognized that, in some cases, economies may not be able to implement the preferred or “in principle” basis of presentation in their direct investment data, because they cannot identify ultimate controlling parents.

c. Analytical use of the different presentations of direct investment

6.44 Data on both the asset and liability presentation and the directional principle presentation are useful for different kinds of analysis.

- Data on an asset and liability basis are consistent with monetary, financial, and other balance sheet data, and thus facilitate comparison between the data sets. These data are needed on an immediate counterparty basis to adequately monitor flows and positions. For instance, if a jurisdiction of convenience that is the home to large SPEs (see paragraphs 4.xx-xx) were to experience a currency or other financial crisis, data users would find data sets that look through the SPEs (or that net data for SPEs without separate identification of gross levels) to be of limited help. SPEs and other entities may transform debt to equity, a long-term instrument to short-term, local

currency to foreign currency, fixed to variable rates, and so on, and these transformations alter risk characteristics in important ways.

- Data on a directional principle basis assist in understanding the motivation for direct investment and take account of the direction of control and influence. In the directional presentation, reverse investment can be seen as equivalent to the withdrawal of investment. The directional principle may be particularly useful for an economy that hosts direct investment enterprises that lend to fellow enterprises or direct investors or host direct investors that borrow from their affiliates.

6.45 The calculations and relationship between the asset and liability presentation discussed in [paragraph 6.37-2](#) and the directional presentations are shown in Box 6.4. In this *Manual*, the directional presentation appears as supplementary items. Under the directional principle, direct investment abroad and direct investment in the reporting economy include both assets and liabilities, and thus, negative values may arise. More details on the directional principle and the conversion between asset and liability and directional presentations can be found in the *OECD Benchmark Definition of Foreign Direct Investment*.

4. Other issues concerning direct investment transactions, positions, and income

a. Round tripping

6.46 Round tripping refers to the channeling abroad by resident direct investors of local funds and the subsequent return of these funds to the local economy in the form of direct investment. . The entity in the other economy to which the local funds are channeled often has limited operations of its own. (There may be

two or other intermediate economies with round tripping.) Its special nature means that, where it is significant, compilers should consider publishing supplementary information on the extent of round tripping. (Round tripping results in an economy being its own ultimate host economy or ultimate investing economy in partner data.). For more details on round tripping including relevant examples, refer to the *OECD Benchmark Definition of Foreign Direct Investment*.

b. Relationships other than direct investment

6.47 Some relationships involve cooperation between enterprises that resemble direct investment relations. However, such cases should not be classified as direct investment unless they meet the definition involving control or influence through voting power. For example, there may be representation on the board of directors, a common board of directors but no formal relationship, participation in policymaking processes, material intercompany transactions, interchange of managerial personnel, provision of technical information, or provision of long-term loans at lower than existing market rates. Creditors of an insolvent company may exercise influence or even effectively control it, but they would not qualify as direct investors unless their debt is converted to equity with voting power. Furthermore, an enterprise may have substantial foreign ownership but no individual investor or group of related investors may have a direct investment stake.

c. Additional detail for direct investment

6.48 The financial instrument, maturity, and currency classifications in Chapter 5 can be used for direct investment. Compilers should break down debt instruments relating to direct investment relationships according to the *SNA/MFSM* instrument classification on a supplementary basis. The split by type of instrument is necessary

for reconciliation with financial account, flow of funds, and sector balance sheets, because these data use the instrument classification and not the international accounts functional classification. However, because of the relationship between the two parties, the strictness of terms, and risks and vulnerability aspects of direct investment-related debt may differ from those of other debt. For those reasons, intercompany lending is identified separately in *External Debt Statistics: Guide for Compilers and Users* (see also paragraph 6.26).

6.49 Classification by partner economy is discussed in Annex 9, with paragraphs xx dealing with direct investment. Partner data for direct investment can be classified according to either the immediate or ultimate investor or host economy. These issues are discussed further in the *OECD Benchmark Definition of Foreign Direct Investment*.

Box 6.4. Derivation of Data under the Directional Principle

The memorandum and supplementary items for direct investment positions and transactions are shown in the table below. They may be rearranged to support different kinds of presentation and analysis.

Components of Direct Investment (Asset/Liability Presentation based on the relationship between the investor and the entity receiving the investment)

| Assets | Liabilities |
|--|--|
| Of direct investors in direct investment enterprises | Of direct investment enterprises to direct investor |
| A1 equity and debt instruments | L1 equity and debt instruments |
| Of direct investment enterprises in direct investor—Reverse investment | Of direct investor to direct investment enterprises—Reverse investment |
| A3 equity and debt instruments | L3 equity and debt instruments |
| Of resident fellow enterprises in fellow enterprises abroad | Of resident fellow enterprises to fellow enterprises abroad |
| A5 Equity and debt instruments | L5 Equity and debt instruments |
| A5.1 equity and debt instruments (if ultimate controlling parent is resident ¹) | L5.1 equity and debt instruments (if ultimate controlling parent is nonresident ²) |
| A5.2 equity and debt instruments (if ultimate controlling parent is nonresident ²) | L5.2 equity and debt instruments (if ultimate controlling parent is resident ¹) |
| | |
| | |
| | |

¹That is, resident in the compiling economy.

²That is, not resident in the compiling economy.

Asset/liability presentation

Direct investment assets:

Equity and debt instruments: $A1 + A3 + A5$;

Direct investment liabilities:

Equity and debt instruments: $L1 + L3 + L5$;

Directional principle presentations

In principle:

Direct investment abroad (outward direct investment): Equity and debt instruments: $A1 - L3 + A5.1 - L5.2$;

Direct investment in the reporting economy (inward direct investment):

Equity and debt instruments: $L1 - A3 + L5.1 - A5.2$;

Acceptable practical alternative:

Direct investment abroad: Equity and debt instruments: $A1 - L3 + A5$;

Direct investment in the reporting economy: Equity and debt instruments: $L1 - A3 + L5$;

6.50 Classification by kind of economic activity (industry) may be of interest for direct investment. The *ISIC* or some regional or national equivalent can be used to compile data on the kind of economic activity. Although this classification is not used for other functional categories, it is useful for direct investment. It is preferable to prepare estimates on both inward and outward direct investment on a dual basis, based on the industry of the direct investment enterprise and the industry of the direct investor. If data on only one basis can be prepared, the preferred industry classification is that of the direct investment enterprise. Industrial classification applies to units, rather than transactions. Often in direct investment data, the industry classification is applied to economy-specific enterprise groups, or to economy-specific enterprise groups in a single institutional sector. If a direct investment enterprise or enterprise group is involved in different economic activities, it is classified according to the predominant activity.

d. Further issues concerning direct investment

6.51 In addition to the classification issues in this chapter, direct investment is discussed in the chapters concerning positions, financial account transactions, and earned income (Chapters 7, 8, and 12, respectively). The cross-cutting issues and links are shown in Annex 6.

6.52 Some aspects of direct investment—other than those directly related to balance of payments and international investment position data—may be of interest, particularly in the host economy, from analytical and policymaking points of view. While the external accounts data show the cross-border flows and stocks, another aspect of the impact of direct investment is on domestic variables such as employment, sales, value added, and gross fixed capital formation. These statistics are called Activities of Multinational Enterprises and are discussed in Chapter 15.

6.52-1 In their present form, direct investment statistics do not separately identify investments that represent the creation of new business enterprises in the host economy and additional injection of funds to existing ones. Greenfield direct investment and extension of capacity is investment in direct investment enterprises established within the last three years and capital injections that are used to expand the capacity of direct investment enterprises that have existed for three years or more. Annex 6 provides further guidance on the definition and collection of supplementary data on greenfield investment and extension of capacity.

6.52-2 Cash pooling arrangements provided by banks allow corporations to externalize the intra-group cash management, and thus, manage their global liquidity more effectively and with lower costs. Annex 6 provides a description of the main types of cash pooling arrangements (single legal account, physical cash pool, and

notional cash pool) and their different statistical treatments (i.e., to classify associated debt instruments as either direct investment or other investment).

6.53 The foreign-controlled corporations subsector overlaps with direct investment. The foreign-controlled corporations subsector includes all subsidiaries and branches resident in the economy. (see paragraphs 4.xx.4.xx for details on foreign control of corporations).

C. Portfolio Investment

6.54 *Portfolio investment is defined as cross-border transactions and positions involving debt or equity securities, other than those included in direct investment or reserve assets.* Securities are defined in paragraph 5.15. The negotiability of securities is a way of facilitating trading, allowing them to be held by different parties during their lives. Negotiability allows investors to diversify their portfolios and to withdraw their investment readily. Investment fund shares or units (i.e., those issued by investment funds) that are evidenced by securities and that are not reserve assets are included in portfolio investment. Further, investments in investment fund shares are always treated as portfolio investment or other investment irrespective of the ownership of voting power (i.e., 10 percent or higher) (see paragraph 6.24). Although they are negotiable instruments, exchange-traded financial derivatives are not included in portfolio investment because they are included in their own separate category.

6.55 Equity not in the form of securities (e.g., in unincorporated enterprises) is not included in portfolio investment; it is included in direct or other investment. Equity in time-share accommodation evidenced by a security is usually portfolio investment (although holdings that provided 10 percent or more of voting power would be direct investment, and holdings not in the form of securities and not included in direct

investment would be other investment). In a few cases identified in paragraph 6.28, debt securities representing financial claims on affiliated enterprises are included in portfolio investment.

6.56 Portfolio investment covers, but is not limited to, securities traded on organized or other financial markets. Portfolio investment usually involves financial infrastructure, such as a suitable legal, regulatory, and settlement framework, along with market-making dealers, and a sufficient volume of buyers and sellers. However, acquisition of shares in hedge funds, private equity funds, and venture capital are examples of portfolio investment that occurs in less public and more lightly regulated markets. (However, shares in these funds are included in other equity and equity in international organizations in other investment when investment is not in the form of a security and not included in reserve assets.) Portfolio investment is distinctive because of the nature of the funds raised, the largely anonymous relationship between the issuers and holders, and the degree of trading liquidity in the instruments.

6.57 Portfolio investment may be presented by instrument, original or remaining maturity, or institutional sector. Further information on portfolio investment is included in Chapter 7 (concerning positions), Chapter 8 (concerning financial account transactions), and Chapter 12 (concerning earned income).

D. Financial Derivatives (Other Than Reserves) and Employee Stock Options

6.58 The definition of the functional category financial derivatives and employee stock options (other than reserves) largely coincides with the corresponding financial instrument class, which is discussed in detail in paragraphs 5.79–5.98. The difference in coverage between the functional category and the

financial instrument is that financial derivatives associated with reserve asset management are excluded from the functional category and included in reserve assets (see paragraph 6.91). This category is identified separately from the other categories because it relates to risk transfer, rather than supply of funds or other resources.

6.59 Unlike other functional categories, no earned income accrues on financial derivatives. Any amounts accruing under the contract are classified as revaluations and are included in the other changes in financial assets and liabilities account. (These entries are discussed in paragraphs 9.30–9.31.) In addition, as noted in the footnote to paragraph 10.121, an intermediary may provide services associated with transactions in derivatives.

6.60 Recording of financial derivatives separately for both assets and liabilities is encouraged for both positions and transactions. However, it is recognized that measuring transactions on a gross basis may not be feasible, in which case net reporting is acceptable. Further, this *Manual* recommends presenting financial derivatives by market risk categories, by instrument, and by trading venue and clearing status on a supplementary basis (see paragraph 5.95).

6.60-1 Information on financial derivatives (other than reserves) and employee stock options is included in Chapter 7 (concerning positions), Chapter 8 (concerning financial account transactions), and Chapter 9 (concerning revaluations); no investment income arises (see paragraph 11.95).

E. Other Investment

6.61 *Other investment is a residual category that includes positions and transactions other than those included in direct investment, portfolio investment, financial derivatives and*

employee stock options, and reserve assets. To the extent that the following classes of financial assets and liabilities are not included under direct investment or reserve assets, other investment includes:

- (a) other equity and equity in international organizations;
- (b) currency and deposits;
- (c) loans (including use of IMF credit and loans from the IMF);
- (d) nonlife insurance technical reserves, life insurance and annuities entitlements, pension entitlements, and provisions for calls under standardized guarantees;
- (e) trade credit and advances;
- (f) other accounts receivable/payable; and
- (g) SDR allocations (SDR holdings are included in reserve assets).

6.62 Other equity and equity in international organizations is included in other investment, when it is not direct investment or reserve assets. Other equity and equity in international organizations, as defined in paragraph 5.26, is not in the form of securities, so it is not included in portfolio investment. Participation in some international organizations (e.g., ownership of currency union central banks) is not in the form of tradable shares and so it is classified in this item. Although equity in some international organizations, such as the BIS, is in the form of unlisted shares, the equity is not tradable by member countries; therefore, it should also be classified in this item. In most cases, equity in quasi-corporations for branches and notional units for ownership of real estate and other natural resources is included in direct investment; however, it is included in other investment if the share of voting power is less than 10 percent. Shares in investment funds are included in other equity and

equity in international organizations when they are not negotiable (see footnote 4, paragraph 6.11)

6.62-1 It is noted that transactions/positions in certain debt instruments (e.g., deposits, loans, other accounts receivable/payable) between selected affiliated financial corporations are included under other investment (see paragraph 6.28). In the case of notional cash pooling arrangements, debt instruments associated with such arrangements (e.g., deposits and loans) are recorded as other investment. Cash pooling arrangements including their types are discussed in paragraph 6.xx and Annex 6.

6.63 Other investment may be split by financial asset or liability class, original or remaining maturity, or institutional sector. Information on other investment is included in Chapter 7 (concerning valuation of positions, particularly loans), Chapter 8 (concerning financial account transactions), and Chapter 12 (concerning earned income).

F. Reserves⁸

Reference:

IMF, *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template*.

⁸ A more complete picture of monetary authorities' international liquidity position is given in *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template (Guidelines)*. The *Guidelines* address a number of key issues, and are drawn on in this text.

1. Reserve assets⁹

a. General definition

6.64 *Reserve assets are those external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, for intervention in exchange markets to affect the currency exchange rate, and for other related purposes (such as maintaining confidence in the currency and the economy, and serving as a basis for foreign borrowing).*¹⁰ Reserve assets must be foreign currency assets and assets that actually exist. Potential assets are excluded. Underlying the concept of reserve assets are the notions of “control,” and “availability for use,” by the monetary authorities.¹¹ The composition of reserve assets and reserve-related liabilities is shown in **Box 6.5**.

b. Residence

6.65 In accordance with the residence concept, reserve assets, other than gold bullion, must be financial claims on nonresidents. Conversely, the authorities’ foreign currency claims on residents, including financial claims on resident banks, are not reserve assets. Nonetheless, foreign currency claims on resident banks can be at the disposal of the monetary authorities and can be readily mobilized to meet demand for foreign exchange. Such financial claims are presented as a

⁹ A more complete picture of monetary authorities’ international liquidity position is given in International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template (Guidelines). The Guidelines address a number of key issues, and are drawn on in this text.

¹⁰For dollarized economies, the need to hold reserves for the purpose of intervention in exchange markets is not relevant for defining the reserve assets of these economies. Dollarization and ^{euroization} are defined in paragraph A3.10.

¹¹Monetary authorities may sometimes employ fund managers to manage reserve assets. In such arrangements, the fund managers are acting as agents and are paid a fee for their services.

supplementary item to the IIP. For the explanation of residence, see Chapter 4, **Section E.**

Box 6.5. Components of Reserve Assets and Reserve-Related Liabilities

Reserve assets

Monetary gold

 Gold bullion

 Unallocated gold accounts

Special drawing rights

Reserve position in the IMF

Other reserve assets

 Currency and deposits

 Financial claims on monetary authorities

 Financial claims on other entities

 Securities

 Debt securities

 Short-term

 Long-term

 Equity and investment fund shares or units

 Financial derivatives

 Other financial claims

Reserve-related liabilities to nonresidents (memorandum items)

 Short-term (on a remaining maturity basis)

| |
|---|
| Credit and loans from the IMF |
| Debt securities |
| Deposits |
| Loans |
| Repo loans |
| Other loans |
| Other short-term foreign currency liabilities to nonresidents |

(See also Appendix 14 Table V for additional supplementary items for reserve-related liabilities.)

c. Definition of monetary authorities

6.66 *The functional concept of monetary authorities is essential for defining reserve assets. Monetary authorities encompass the central bank (which subsumes other institutional units included in the central bank subsector, such as the currency board) and certain operations usually attributed to the central bank but sometimes carried out by other government institutions or commercial banks, such as government-owned commercial banks. Such operations include the issuance of currency; maintenance and management of reserve assets, including those resulting from transactions with the IMF; and operation of exchange stabilization funds. In economies in which extensive reserve assets are held outside of the central bank, supplementary information should be provided on the institutional sector of holdings of those reserve assets.*

d. Control

6.67 In general, only external financial claims actually owned by the monetary authorities can be classified as reserve assets. Nonetheless, ownership is not the only condition that confers control. In cases in which institutional units (other than the monetary authorities) in the reporting economy hold legal title to external foreign currency assets and are permitted to transact in such assets only on terms specified by the monetary authorities or only with their express approval. In such cases, the assets can be considered reserve assets because they are under the direct and effective control of the monetary authorities. To be counted in reserve assets, the conditions to be met are that:

- the resident entity can transact only in those financial claims with nonresidents on the terms specified by the monetary authorities or only with their express approval; and
- the authorities have access on demand to these financial claims on nonresidents to meet balance of payments financing needs and other related purposes; and
- a prior law or an otherwise legally binding contractual arrangement confirms this agency role of the resident entity that is actual and definite in intent.

6.68 If such assets are included under reserve assets, to avoid double counting, they should not also be classified as assets, or transactions in assets, in other components of the IIP and balance of payments. They are classified within reserve assets depending on their nature (e.g., deposits and securities are classified as such). Except in unusual circumstances, direct and effective control is not to be construed as extending beyond assets owned by deposit-taking corporations.

e. Availability for use

6.69 Reserve assets must be readily available in the most unconditional form. A reserve asset is liquid in that the asset can be bought, sold, and liquidated for foreign currency (cash) with minimum cost and time, and without unduly affecting the value of the asset.¹² This concept refers to both nonmarketable assets, such as demand deposits, and marketable assets, such as securities for which there are ready and willing sellers and buyers. The ability to raise funds by using the asset as collateral is not sufficient to make an asset a reserve asset. Some deposits and loans can be liquid and included in reserve assets, although they are not necessarily marketable.

6.70 To be readily available to the authorities to meet balance of payments financing needs and other related purposes under adverse circumstances, reserve assets generally should be of high quality.

f. Further clarifications on reserve assets

6.71 As a consequence of their purpose of meeting balance of payments financing needs, and supporting the exchange rate, reserve assets must be both denominated and settled in foreign currency. Denominated is defined to mean the currency in which the contract is specified. (Currency of denomination and currency of settlement are discussed in paragraphs **3.98–3.103**.)

6.72 Furthermore to be liquid, reserve assets must be denominated and settled in convertible foreign currencies, that is, currencies that are freely usable for settlements of international transactions.¹³ In addition, assets denominated in gold and SDRs may qualify as reserve assets.

¹²No time limit is provided, but to qualify as reserves, an asset should be available in a very short period of time given the speed at which experience suggests a foreign exchange need can arise in adverse circumstances.

¹³The term “freely usable” is not used in a restrictive sense to cover the currencies in the SDR basket

6.73 In some instances, economies may hold assets denominated in the currency of a neighboring economy because the economy's risk exposures are closely related to their neighbor given the composition of their international trade, even though the currency may not be widely traded. These assets should be excluded from reserve assets (and included under the appropriate functional category and instrument) if the currency does not meet the definition of a convertible foreign currency set out in paragraph 6.72, but supplementary data can be provided. Such circumstances are envisaged when an economy is highly dependent on a larger regional neighbor for its international trading activity.¹⁴

6.74 Assets that are denominated in or indexed to the domestic currency but settled in foreign currency cannot be reserve assets, because the value of such assets would decline along with the domestic currency in the circumstance of a domestic currency crisis.

6.75 An existing asset that is committed for a future use but not encumbered can be included provided that the asset is readily available to meet a balance of payments financing need (and other related purposes stated in paragraph 6.64). An asset should not be denied as a reserve asset simply because the use to which the asset is to be put is a foreseeable one. However, when an asset is not readily available—such as an asset whose use is blocked—the asset should not be counted as reserve assets.

g. Classification of reserve assets

only.

¹⁴It is possible but unlikely that such dependence could arise with an economy that is not a neighbor.

6.76 Reserve assets consist of monetary gold, SDR holdings, reserve position in the IMF, currency and deposits, securities (including debt and equity securities), financial derivatives, and other financial claims (loans and other financial instruments).

6.77 Monetary gold, SDR holdings, and reserve position in the IMF are considered reserve assets because they are assets readily available to the monetary authorities in unconditional form. Currency and deposits, securities, and other assets in many instances are equally available and therefore qualify as reserve assets.

6.78 *Monetary gold is gold to which the monetary authorities (or others who are subject to the effective control of the monetary authorities) have title and is held as reserve assets.* It consists of gold bullion (including gold coins, ingots, bars with a purity of at least 995/1,000, and gold bullion held in allocated and pool allocated gold accounts, regardless of the location of the account)¹⁵ and unallocated gold accounts with nonresidents that give title to claim the delivery of gold.¹⁶ Gold bullion is usually traded on organized markets or through bilateral arrangements between central banks. To qualify as reserve assets, gold accounts must be readily available upon demand to the monetary authorities.

6.79 **Allocated, pool allocated and unallocated gold accounts** are to be distinguished from accounts that are linked to gold (accounts indexed to gold) but do not give title to claim delivery of gold. The latter are classified as currency and deposits and are included within reserve assets provided they meet the criteria of reserves.

¹⁵ However, transactions with residents in gold bullion are not recorded in the balance of payments (see paragraph 9.18).

¹⁶ See paragraphs 5.76–5.77 for definitions of allocated, pool allocated, and unallocated gold accounts.

6.80 If the monetary authorities deposit gold bullion in an unallocated gold account, the gold bullion is demonetized (see paragraph 9.18 (f)) and this is recorded in the other changes in assets account of the monetary authorities. If the account is with a nonresident, a transaction in nonmonetary gold is recorded in the goods and services account. However, transactions in gold bullion as reserve assets between monetary authorities and with international financial institutions are recorded as transactions in gold bullion and are not recorded as other changes in assets. If the unallocated gold account is with a nonresident and available on demand, a transaction is recorded in currency and deposits, and if held by a monetary authority as a reserve asset the position is subsequently reclassified to monetary gold (unallocated gold accounts) via other changes in the volume of assets.¹⁷ However, if the deposit is with another monetary authority or an international financial institution, a transaction in unallocated gold accounts is recorded.

6.81 To minimize risks of default in gold lending transactions,¹⁸ monetary authorities can require adequate collateral instead of cash (such as securities) from the depository. Such securities collateral received should not be included in reserve assets or portfolio investment as the original owner maintains the economic ownership of the securities. This prevents double counting as the gold lent remains an asset of the monetary authorities.¹⁹

¹⁷Similarly, interest accruing on unallocated gold accounts is recorded as a transaction in currency and deposits within reserve assets by the monetary authority. If national practice is to include such interest under monetary gold, the amount of interest accruing is reclassified in the other changes in assets account.

¹⁸Sometimes known as gold deposits or gold loans.

¹⁹If the securities received as collateral are repoed out for cash, a repo transaction should be reported.

6.82 Allocated and unallocated gold accounts with nonresidents out on swap by the monetary authorities for cash collateral are excluded from reserve assets and either demonetized (gold bullion) or reclassified as other investment, currency and deposits, assets (unallocated gold accounts), if the gold accounts are not readily available for meeting balance of payments financing needs²¹ (or available for meeting balance of payments financing needs only if a substitute reserve asset has to be provided as collateral). A loan liability to a nonresident²² from a gold swap is recorded in “other investment,” with the foreign currency received (provided it is a financial claim on a nonresident and meets the criteria for reserve assets) being recorded as an increase in currency and deposits within reserve assets.

6.83 Any unallocated gold account liabilities of resident entities to nonresident monetary authorities are to be classified as other investment, currency and deposits.

6.84 SDR holdings are reserve assets created by the IMF and are equivalent to liquid balances in convertible currencies in nearly every respect. Further information on SDRs is provided in paragraphs 5.34–5.35.

6.85 Reserve position in the IMF is the sum of (a) the “reserve tranche,” that is, the foreign currency (including SDRs) amounts that a member country may draw from the IMF at short notice;²⁴ and (b) any indebtedness of the IMF (under a loan agreement) in the General Resources Account that is readily available to the

²¹ Same principle applies to gold lending.

²²If the liability is to a resident, the liability is not in the balance of payments or IIP, but it is reported under repo loans in other foreign currency liabilities (see [Table V](#) in Appendix 14).

²⁴Reserve-tranche positions in the IMF are liquid claims of members on the IMF that arise not only from the reserve asset payments for quota subscriptions but also from the sale by the IMF of their currencies to meet the demand for use of IMF resources by other members in need of balance of payments support. Repayments of IMF resources in these currencies reduce the liquid claim of the member whose currency was supplied. In [Table A9-I-1 in Appendix 14](#) on currency composition, the reserve tranche positions in the IMF should be classified in the “SDR basket.” The domestic currency component of the quota is considered in economic terms to be of a contingent nature and so is not classified as an asset or liability in the international accounts.

member country, including the reporting country's lending to the IMF under the General Arrangements to Borrow (GAB) and the New Arrangements to Borrow (NAB). While a member country must present a declaration of balance of payments–related need to make a purchase in the reserve tranche (reduction in reserve position), the IMF does not challenge a member's request for reserve tranche purchases. Convertible currencies from a reserve tranche purchase may be made available within days.

6.86 Deposits refer to those available on demand; deposits with a fixed term that are redeemable on demand or at very short notice without unduly affecting the value of the deposit can be included. Deposits included in reserve assets are those held in foreign central banks, the BIS, and other nonresident deposit-taking corporations, and deposit agreements with IMF Trust Accounts that are readily callable to meet a balance of payments financing need. Because short-term loans provided by the monetary authorities to other central banks, the BIS, and other deposit-taking corporations are much like deposits, it is difficult in practice to distinguish the two. For this reason, by convention, and consistent with the treatment of interbank positions (see paragraph 5.42), the reporting of deposits in reserve assets should include short-term foreign currency loans that are redeemable upon demand, made by the monetary authorities to these nonresident deposit-taking corporations when there is uncertainty between a loan and a deposit. Foreign currency loans that are available on demand without unduly affecting the value of the asset, and made by the monetary authorities to nonresident non-deposit-taking corporations, and loans to IMF Trust Accounts that are readily repayable to meet a balance of payments financing need can qualify as reserve assets (“other financial claims”). But other loans by the monetary

authorities to nonresidents not readily available to meet balance of payments financing needs are not reserve assets.

6.87 **Securities** include liquid and marketable equity and debt securities issued by nonresidents; long-term securities (such as 30-year U.S. Treasury bonds) are included. Unlisted securities (i.e., securities not listed for public trading) are, in principle, excluded unless the securities are liquid enough to qualify as reserve assets.

6.88 Securities that have been transferred under reverse transactions (e.g., repos) by the monetary authorities in exchange of cash collateral remain assets of the original authorities. However, they are generally not readily available for meeting balance of payments financing needs. Therefore, such securities should be excluded from reserve assets and reclassified as portfolio investment assets through the end of the transaction. In regard to foreign currency received, provided it meets the reserve assets criteria it should be recorded as an increase in currency and deposits within reserve assets, while a loan liability should be recorded under “other investment”.²⁶

6.89 In the case of reverse repos, the funds provided to the counterparty should be recorded as a decrease in currency and deposits within reserve assets, but if the financial claim (i.e., repo asset) is liquid and available upon demand to the monetary authorities, then it is considered part of the reserve assets in “other financial claims” (or “deposits” if classified in national measures of broad money).

6.90 When securities are lent or borrowed in exchange for other securities and no cash is exchanged, no transaction should be reported.²⁷ Securities lent are

²⁶ If the liability is to a resident, the liability is not in the balance of payments or IIP, but it is reported under repo loans in other foreign currency liabilities (see **Table V** in Appendix 14)

²⁷ If the securities are not readily available, they should be reclassified to portfolio investment.

the assets of the original authorities, and securities collateral received are not included as reserve assets of the receiving monetary authorities.

6.91 Financial derivatives are recorded in reserve assets only if the derivatives pertain to the management of reserve assets, are integral to the valuation of such assets, and are under the effective control of the monetary authorities. Because they pertain to the management of assets, these transactions and positions are recorded on a net basis (assets less liabilities) at market value.

6.92 Other financial claims include loans to nonresident non-deposit-taking corporations, long-term loans to IMF Trust Accounts such as the Poverty Reduction and Growth Trust (PRGT), Resilience and Sustainability Trust (RST) (see Annex 9 for details on these facilities) that are readily repayable to meet a balance of payments financing need (see paragraph 6.86), loans arising from a reverse repo (unless classified as deposits) (paragraph 6.89), and other financial assets not included previously but that are foreign currency assets that are available for immediate use (such as nonnegotiable investment fund shares or units as described in paragraph 6.101).

6.92-1 Reserve asset may be presented as per the component details in Box 6.5. Further information on reserve asset is included in Chapter 7 (concerning positions), Chapter 8 (concerning financial account transactions), and Chapter 12 (concerning earned income).

h. Selected cases

Special purpose government funds

6.93 Some governments create special purpose government funds, usually called sovereign wealth funds (SWFs). *Created and owned by the general government*

for macroeconomic purposes, SWFs hold, manage, or administer assets to achieve financial objectives, and employ a set of investment strategies which include investing in foreign financial assets. The funds are commonly established out of balance of payments surpluses, official foreign currency operations, the proceeds of privatizations, fiscal surpluses, and/or receipts resulting from commodity exports. The establishment of a special purpose government fund raises the issue of whether or not the external assets held in the fund should be included in reserve assets.

6.94 A key determination is whether some legal or administrative guidance results in the assets being encumbered in a way that precludes their ready availability to the monetary authorities.

6.95 If the special purpose government fund's external assets are on the books of the central bank, or an agency of the central government, that allows the monetary authorities control over the disposition of funds, then the presumption is that the assets are reserve assets (provided all other criteria for being a reserve asset are met). On the other hand, if the funds are held in a long-term fund with a separate legal identity, the presumption is that they should not be included in reserve assets, not least because the ready availability criterion is less likely to be met.

6.96 In some cases, while assets are invested in a separate investment corporation, there may be an agreement that such assets can be readily called back if needed. In other cases, funds could be withdrawn during the annual budgetary process.

6.97 Any final determination of whether an asset can be classified as a reserve asset or not, depends on an examination of the circumstances: namely, is the asset readily available to the monetary authorities and is there a liquid claim of a resident

entity on a nonresident in foreign currency? But in the absence of legal or administrative impediments, and given the fungibility of assets, even assets that had been earmarked as part of a special purpose government fund—but that could be used to meet balance of payments financing needs and other related purposes—are reserve assets (subject to the other criteria being met, including, importantly, the control of the monetary authorities over the disposition of the funds).

6.98 Assets held in special purpose government funds that meet the definition of reserve assets are classified within reserve assets depending on their nature. So, if the special purpose government funds hold deposits, securities, and other reserve assets, these are classified as such within reserve assets. Assets held in a resident special purpose government fund that are financial claims on nonresidents but do not meet the criteria to be classified as reserve assets are classified in the financial account and IIP under the appropriate instrument and functional category. If special purpose government funds own direct investment equity and debt securities that could be classified in either direct investment or reserves assets, as general guidance, in the hierarchy of the balance of payments and IIP between direct investment and reserve assets, the equity securities should be classified as direct investment ahead of reserve assets, and debt securities should be classified as reserve assets ahead of direct investment (see also **paragraph 6.22**).

Pooled assets

6.99 As a means of reserve assets management, monetary authorities from different economies might cooperatively invest through an asset pool. Such pooled asset arrangements are collective investment schemes under which funds provided by participants are held in an investment vehicle (usually nonresident of the participants' economies) that conducts investments. The participants have a

financial claim on the collective investment scheme. Some pooled asset arrangements may have features that constrain the use of the financial claim as a reserve asset. To determine whether the financial claim on the pooled asset arrangement meets the definition of reserve assets, as with special purpose government funds, an examination of the legal and institutional framework of the arrangement is needed.

6.100 As with other reserve assets, the financial claim on the asset pool needs to be readily available to the monetary authorities and to be a liquid claim in foreign currency on nonresidents. In addition, other factors should be considered in determining whether the financial claim is a reserve asset. These include the following:

- **The ability to use pooled assets to raise external liquidity in foreign currency.** Even if the claim is in foreign currency, a high concentration of the underlying assets in claims on the domestic economy that constrains the ability of that economy to generate external liquidity or that results in the foreign currency value of the instrument being significantly affected in a time of crisis (such as a high concentration in domestic currency assets) would cause considerable doubt as to whether the instrument could be included in reserve assets.
- **Whether the assets are truly foreign currency claims.** An asset pool might be structured such that, while the assets are denominated in foreign currency, the monetary authority has a de facto claim in the domestic currency. In this instance, it is inappropriate to classify the asset as a reserve asset for the reasons described in paragraph 6.74.

6.101 Pooled assets are classified within reserve assets depending on their nature. For instance, if the participant can readily transact in these financial claims

only by selling its claim back to the investment vehicle, the financial claim might need to be classified as a nonnegotiable investment fund share (an “other financial claim”). Pooled assets that are financial claims on nonresidents but that do not meet the criteria to be classified as reserve assets are classified in the financial account according to their nature (most probably an equity asset) under the appropriate functional category.

Central bank swap arrangements

6.102 Assets created under reciprocal facilities (swap arrangements) for the temporary exchange of deposits between the central banks of two economies warrant mention. These swap arrangements typically do not conform fully to a standard currency swap on financial market. These off-market central bank currency swap arrangements should be recorded as an exchange of deposits with maintenance of value once the arrangement is activated and the money is drawn by either party.. Following this approach, each central bank acquires a foreign asset in foreign currency, and creates a foreign liability in domestic currency. Since the liability deposit account in domestic currency is fully indexed to a foreign currency (the currency of the partner economy), the liability in domestic currency should be treated as being denominated in that foreign currency (see paragraph **3.101**). To accomplish this treatment, periodic revaluation adjustments to the liability should be carried out to reflect the total amount of domestic currency needed to buy the foreign currency to be delivered, including any interest payment.

6.102-1 Deposits (in foreign exchange) acquired by the central bank initiating the arrangement are treated as reserve assets if the exchange provides the central bank with assets that **fully meet the reserve assets criteria**. If the criteria are not met (for example, if the funds are not readily available because they are subject to

authorization by the counterpart central bank), the funds would not conform to the definition of reserve assets and the deposit should be recorded as “other investment”. Reciprocal deposits acquired by the partner central bank also are considered as reserve assets, as long as they meet the general criteria for being reserve assets, including being denominated and settled in a convertible currency.

6.102-2 If the swap arrangement has the characteristics of a standard (market priced) swap contract, it is recorded as a standard currency/foreign exchange swap. Namely, an exchange of deposits with the simultaneous creation of a forward contract.

6.103 Reciprocal currency arrangements between central banks may also take the form of a securities repurchase agreement. In this case, one central bank transfers securities (sometimes denominated in its domestic currency) to another central bank in exchange for foreign currency, with the transactions later reversed, typically three months in the future. Such transactions should be treated as collateralized loans, with the central bank that initiated the transaction paying corresponding interest on the foreign currency received. The cash-taking central bank can therefore include the foreign currency received in its reserve assets if the criteria for reserve assets are met. The cash-receiving central bank should reclassify the repoed out securities from reserve assets to portfolio investment, if they were included in reserve assets prior to the repo transaction but they are no longer readily available for meeting balance of payments financing needs (or available for meeting balance of payments financing needs only if a substitute reserve asset has to be provided as collateral). The cash-providing central bank should not include the securities received as collateral in its reserve assets as the securities are treated as not having changed economic ownership (see **paragraph**

5.54). See also paragraph 6.90 on securities lending or borrowing transactions in reserve assets.

6.104 When a central bank acquires or disposes of a liquid foreign currency claim on a nonresident from a domestic bank (e.g., through an exchange of foreign and domestic currency deposits, a change in reserve requirements on foreign currency deposits, or other domestic transactions that increase or change the composition of reserve assets), this is recorded through the other changes in volume account. It is not recorded in the balance of payments, given that the transaction is between two residents (see paragraph 3.6).

i. Foreign assets that do not qualify as reserve assets

6.105 Lines of credit (including the arrangements with IMF such as the Flexible Credit Line (FCL) and the Precautionary and Liquidity Line (PCL)) that could be drawn on and foreign exchange resources that could be obtained under swap agreements are not reserve assets because they do not constitute existing financial claims. (see paragraphs xx, Annex 9 for additional details on FCL and PLL). Real estate owned by the monetary authorities is not to be included in reserve assets because real estate is not considered a liquid asset. Silver bullion, diamonds, and other precious metal and stones are not included in reserve assets because they are considered goods and not financial assets. Further, crypto assets without corresponding liabilities should not be included in reserve assets as they are treated as nonproduced nonfinancial assets.

6.106 Capital subscriptions to international organizations that are not readily available to the monetary authorities do not meet the definition of reserve assets. These subscriptions are included in other investment, other equity and equity in international organizations.

6.107 Pledged assets are typically not readily available. Those pledged assets that are encumbered and therefore are not readily available should be excluded from reserve assets.

6.108 An example of pledged assets is collateral used for third-party loans and third-party payments. If these assets are encumbered, they should be excluded from reserve assets. However, assets may be pledged as collateral to provide guarantees in the event of default by another entity, or for lines of credit, and may not be encumbered until events occur to trigger the pledge. Such assets can be included in reserve assets until encumbered. Other examples of pledged assets that are to be excluded from reserve assets include (a) assets pledged by the monetary authorities to investors as a condition for the investors to invest in securities issued by domestic entities (such as central government agencies), if such pledged assets are considered encumbered; (b) assets lent by the monetary authorities to a third party that are not available until maturity; and (c) assets provided as collateral under reverse transactions (e.g., repos) that are not readily available for meeting balance of payments financing needs.

6.109 The pledged assets should be excluded only to the extent of the value of the pledge; in other words, if the pledge is valued at 100, the maximum amount to be excluded from reserve assets is 100.

6.110 In some circumstances, assets held as reserve assets may be “frozen,” such as by a foreign government or international organizations (in the case of SDR holdings and reserve positions in the IMF) within whose jurisdiction the assets are located, restricting their availability. In such circumstances, the reserve assets that are affected are to be reclassified to the relevant functional category, such as “portfolio investment” or “other investment” if securities, bank deposits, SDR holdings, and the reserve position in the IMF are “frozen.” If monetary gold is

“frozen”, either it is demonetized (gold bullion) or reclassified as other investment, currency and deposits, assets (unallocated gold accounts).

6.111 Foreign currency claims that are transferred to the monetary authorities by other institutional units in the reporting economy just prior to certain accounting or reporting dates, with accompanying reversals of such transfers soon after those dates (commonly known as “window dressing”), should not be counted as reserve assets.

6.112 Net creditor positions in regional payments arrangements that involve reciprocal lines of credit—a characteristic of loan arrangements (see paragraph 5.51)—are classified as loans in other investment²⁸ and are not included in reserve assets, except in circumstances in which they are considered readily available to the monetary authorities to meet a balance of payments need and other related purposes. Net asset balances in bilateral payments agreements have much in common with other types of tied loans that authorities make to stimulate exports, provide aid, or further other aspects of government policy. Such bilateral payments agreement balances are therefore conventionally excluded from reserve assets. Also, owing to their nature, working balances of government agencies are not included in reserve assets.

j. Other issues

6.113 Assets owned by the monetary authorities that do not meet the criteria to be classified as reserve assets are classified in the financial account and IIP under the appropriate instrument and functional category.

²⁸Net debtor positions in such arrangements are also classified as loans.

6.114 Currency unions and economies that adopt another currency (such as dollarization and euroization) raise specific issues for the concept of reserve assets. These issues are discussed in Appendix 3.

2. Reserve-related liabilities

6.115 *Reserve-related liabilities are defined as foreign currency liabilities of the monetary authorities that can be considered as direct claims by nonresidents on the reserve assets of an economy.* Though not identified as such in the standard components of the balance of payments and IIP, where they are included in other categories (notably portfolio and other investment), reserve-related liabilities are important to monitor. Reserve-related liabilities can be presented by instrument and maturity (see Appendix 14, **Table V**). Short-term reserve-related liabilities on a remaining maturity basis are a memorandum item to the IIP (as shown in Box 6.5). Some economies may choose to present the full table of foreign currency assets and liabilities in Appendix 14, **Table V**, separately identifying the short-term reserve-related liabilities.

6.116 The value of the SDR allocation and loans from the IMF to monetary authorities are included in reserve-related liabilities. Other liabilities covered include:

- Foreign currency loan and deposit liabilities of the monetary authorities to nonresidents, including those arising from foreign currency swaps with other central banks, loans from BIS, and from other deposit-takers;
- Foreign currency loan liabilities to nonresidents associated with securities that the monetary authorities have repoed out;
- Foreign currency securities issued by the monetary authorities and owed to nonresidents; and

- Other foreign currency liabilities to nonresidents, including foreign currency accounts payable and financial derivatives—recorded on a net basis (liabilities less assets)—settled in foreign currency and associated with, but not within the definition of, reserve assets (see paragraph 6.91). Such financial derivatives could include those that are not sufficiently liquid or are not integral to the valuation of reserves assets.

Liabilities to residents and liabilities that are both denominated and settled in domestic currency are not included.



BOX 6.6. Net International Reserves¹

The concept of Net International Reserves (NIR) is widely used as an indicator of a country's external vulnerability. This BOX presents a standard statistical definition of NIR based on the conceptual framework of this *Manual* and the *Guidelines for the International Reserves and Foreign Currency Liquidity Template (IRFCL Template)*. This statistical definition provides a comprehensive approach aimed to inform reserve adequacy assessments and macroeconomic policy advice. However, country-specific considerations remain paramount in the design and monitoring of IMF supported programs. The introduction of this standardized statistical definition of NIR should not limit the flexibility to adjust the measurement of NIR considering country specific conditions and circumstances.

- **Net International Reserves = Reserve assets minus predetermined short-term net foreign currency drains**

NIR are calculated as reserve assets (RA) minus predetermined short-term net foreign currency drains (FCD). FCD are predetermined contractual foreign currency obligations (foreign currency outflows net of inflows) scheduled to come due during the 12 months

ahead recorded at cash-flow value when the flows take place, as defined in Section II, *IRFCL Template*. FCD include short-term on- and off-balance sheet (e.g., financial derivatives, guarantees are not included) foreign currency obligations to residents and nonresidents. This is because RA will be used regardless of whether the drain arises from residents or nonresidents. FCD also include short-term on- and off-balance sheet foreign currency obligations of the central government, as payment of these obligations would usually involve the use of RA.

In cases where short-term foreign currency outflows/inflows vis-à-vis the domestic currency from forwards and futures are scheduled in FCD (*IRFCL Template*, Section II, 2), corresponding market values of the derivative contracts recorded in RA (Section I.A (5) of the *IRFCL template*) should be excluded in the calculation of NIR to avoid double counting.² Only market values of foreign exchange forwards/swaps, for which notional values are recorded in Section II.2, should be excluded; market values of other types of derivatives (e.g., options) should remain in RA in the calculation of NIR. In cases where notional values of non-deliverable forwards (NDFs) are included in FCD, they should be excluded in the calculation of NIR as the payment at maturity would only involve the market value of the contract (the market value is included in RA if the contract is settled in foreign currency).

These concepts and data are already covered in this *Manual* and the *Guidelines for the IRFCL Template*. The definition of RA on a gross basis is based on this *Manual*. Although the concept of FCD goes beyond the residence concept of this *Manual*, Section II of the IRFCL Template covers these data.³ At the time of drafting this *Manual*, the compilation of the IRFCL Template is a requirement to subscribe to the IMF's Special Data Dissemination Standard (SDDS) and to adhere to the SDDS Plus. Even if the country does not compile the IRFCL Template yet, the same information could be collected from the authorities based on the *Guidelines for the IRFCL Template* to calculate NIR.

¹ The statistical definition of NIR goes beyond the general scope of this Manual (the balance of payments framework does not cover transactions and positions with residents). However, this Manual provides guidance on this issue considering that it is an essential concept widely used to assess external vulnerability of a country and that there are strong needs for a standardized definition as a benchmark to define country specific NIR. The IRFCL Template should play the central role in collecting data related to NIR. The Guidelines for the IRFCL Template provide a comprehensive framework to collect data related to reserve assets encompassing positions with residents and nonresidents, on- and off-balance sheet items, and those for the monetary authorities and the central government (including guarantees, credit lines, and options), as well as financial instruments denominated in foreign currency and settled in domestic currency.

² This exclusion should only apply to the calculation of NIR. The recording of RA in the BOP, IIP, or the recording of items in the *IRFCL Template* should not change. The treatment of financial derivatives in reserve assets of balance of payments and IIP are described in [paragraph 6.xx](#).

³ Section II in the IRFCL template allows for total pre-determined short-term drains to be decomposed between those of the monetary authorities and the central government, although in practice in most cases this decomposition is not provided. In the very rare case, where the central government has sufficient short-term FX assets, held overseas, then the short-term liabilities of the central government would not be included in the predetermined short-term drains in the calculation of NIR (the liabilities still need to be recorded in the IRFCL Template).

Chapter 7. Balance Sheet: International Investment Position

(Update to *BPM6* Chapter 7)¹

Chapter 7 Balance Sheet: International Investment Position

A. Concepts and Coverage

References:

2025 SNA, Chapter 14, Balance Sheet.

IMF, *Monetary and Financial Statistics Manual and Compilation Guide 2016*.

BPM6 Compilation Guide (its update)

IMF and others, *External Debt Statistics: Guide for Compilers and Users 2014*.

7.1 The international investment position (IIP) is a statistical statement that shows at a point in time the value and composition of

(a) financial assets of residents of an economy that are claims on nonresidents and gold bullion held as reserve assets, and

(b) liabilities of residents of an economy to nonresidents.

¹ This chapter title is aligned with the related *2025 SNA* chapter title “Balance Sheet”. However, changes to this title may be considered at the drafting stage.

The difference between an economy's external financial assets and liabilities is the economy's net IIP, which may be positive or negative.

7.2 The IIP is a subset of the national balance sheet. The net IIP plus the value of nonfinancial assets equals the net worth of the economy, which is the balancing item of the national balance sheet. The classification of nonfinancial assets is shown in Table 5.1 and financial instruments and their corresponding income items in Table 5.2.

7.3 The IIP relates to a point in time, usually at the beginning of the period (opening value) or end of the period (closing value). The integrated IIP presentation in Table 7.1 explains the changes between the values in the opening and closing positions of the IIP through the accumulation accounts, which consist of the balance of payments' financial account transactions and the other changes in financial assets and liabilities accounts. The latter, in turn, comprises revaluations and other changes in volume.

7.4 This chapter explains the coverage, presentation, classification, timing, and valuation issues for the IIP, and its relationship to accumulation accounts.

7.5 The content of the integrated IIP can be presented in several different ways.

Table 7.1 shows an overview of the structure and components of the integrated IIP by functional category and broad financial instruments. This presentation emphasizes how changes in the IIP result from financial account transactions (discussed in Chapter 8) and other changes in financial assets and liabilities (discussed in Chapter 9) during a period.

7.6 Table 7.2 provides another presentation that emphasizes the breakdown of the integrated IIP by institutional sector and functional category. Institutional sectors in

the integrated IIP refer to the resident sector, not the counterpart sector (i.e., the sector of the domestic holder or lender for assets, and the sector of the domestic issuer or borrower for liabilities).

Additional detail

7.7 Previous version of the *Manual* highlighted the importance of compiling the IIP, emphasizing the role of balance sheet analysis in understanding sustainability and vulnerability. They also underscored the importance of analyzing currency mismatches, the implications of sector and interest rate composition of debt, and the effect of the maturity structure on liquidity. Consequently, currency composition and remaining maturity analyses of the IIP are encouraged as additional information. Annex 14 provides presentation tables of currency composition of assets and liabilities by sector with a breakdown by certain foreign currencies, namely the U.S. dollar, euro, yen, and others, together with a breakdown by original maturity. The tables also provide information on the remaining maturity of long-term debt liabilities, with a breakdown by sector. These tables are consistent with the standard components of the IIP and with the presentation adopted in *External Debt Statistics: Guide for Compilers and Users 2014*.

7.8 This edition of the *Manual* reflects the increasing importance of the integrated IIP presentation for analytical and policy purposes. The granular data from the integrated IIP presentation (transactions, revaluations, and other changes in volume) are extremely helpful for analyzing net IIP dynamics (see paragraphs 19.xx-xx). The integrated IIP is part of the standard components of *BPM7* as presented in Annex 14 (reference to relevant paragraphs of Chapter 19 will be added). Separate reporting of data on a) debt cancellation and write-offs; and b)

reclassifications under other changes in volume is encouraged (i.e., they will be part of supplementary items) as indicated in the Note to Table 7.1.

Table 7.1. Integrated International Investment Position Statement
(Including functional categories, instruments, and link to accumulation accounts)

| | Beginning of period IIP | Accumulation accounts | | | | | | End of period IIP |
|--|----------------------------|---|--|-----------------------|---------------------|-------------------------|--|----------------------|
| | | Transactions from BOP's financial account | Other changes in financial assets and liabilities accounts | | | | | |
| | | | Revaluations | | | Other changes in volume | | |
| | | | Total | Exchange rate changes | Other price changes | Total | Of which: debt cancellation and write-offs * | |
| Assets | | | | | | | | |
| By functional category | | | | | | | | |
| Direct investment | | | | | | | | |
| Portfolio investment | | | | | | | | |
| Financial derivatives (other than reserves) and ESOs | | | | | | | | |
| Other investment | | | | | | | | |
| Reserve assets | | | | | | | | |
| By instrument | | | | | | | | |
| <i>Equity and investment fund share/units</i> | | | | | | | | |
| <i>Debt instruments</i> | | | | | | | | |
| <i>Special drawing rights</i> | | | | | | | | |
| <i>Currency and deposits</i> | | | | | | | | |
| <i>Debt securities</i> | | | | | | | | |
| <i>Loans</i> | | | | | | | | |

| | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|
| <p><i>Insurance, pension, standardized guarantee schemes</i></p> <p><i>Other accounts receivable/payable</i></p> <p><i>Other financial assets and liabilities</i></p> <p><i>Monetary gold</i></p> <p><i>Financial derivatives and ESOs</i></p> | | | | | | | | | |
| Total assets | | | | | | | | | |
| <p>Liabilities</p> <p>By functional category</p> <p>Direct investment</p> <p>Portfolio investment</p> <p>Financial derivatives (other than reserves) and ESOs</p> <p>Other investment</p> <p>By instrument</p> <p><i>Equity and investment fund share/units</i></p> <p><i>Debt instruments</i></p> <p><i>Special drawing rights</i></p> <p><i>Currency and deposits</i></p> <p><i>Debt securities</i></p> <p><i>Loans</i></p> <p><i>Insurance, pension, standardized guarantee schemes</i></p> <p><i>Other accounts receivable/payable</i></p> | | | | | | | | | |



| | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|
| <i>Other financial assets and liabilities</i> <i>Financial derivatives and ESOs</i> | | | | | | | | | |
| Total liabilities | | | | | | | | | |
| Net IIP | | | | | | | | | |
| Note: this table is expository; for standard components, see annex 14. ESO = employee stock option; IIP = international investment position. * Of which items and do not necessarily add up to the total of other changes in volume. | | | | | | | | | |

For additional information

7.9 Several other guides provide specialized guidance on particular aspects of the IIP and related statistics, namely:


- **BIS, *Guide to the International Financial Statistics* (BIS Paper No. 14, February 2003);** 
- IMF, *Coordinated Direct Investment Survey Guide 2015*;
- IMF, *Coordinated Portfolio Investment Survey Guide, third edition*;
- IMF and others, *External Debt Statistics: Guide for Compilers and Users 2014*;
- IMF, *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template*; and
- OECD, *OECD Benchmark Definition of Foreign Direct Investment, fifth edition.*

Table 7.2. Overview of the Integrated International Investment Position
(With resident institutional sector breakdown)

| Assets (beginning of period) | | | | | Liabilities (beginning of period) | | | | | |
|--|-----------------------|--------------------|------------------------|---------------------------|--|---------------------------|------------------------|--------------------|-----------------------|---------------|
| Total economy | Households and NPISHs | General Government | Financial corporations | Nonfinancial corporations | By functional category | Nonfinancial corporations | Financial corporations | General Government | Households and NPISHs | Total economy |
| | | | | | Direct investment | | | | | |
| | | | | | Portfolio investment | | | | | |
| | | | | | Financial derivatives (other than reserves) and ESOs | | | | | |
| | | | | | Other investment | | | | | |
| | | | | | Reserve assets | | | | | |
| | | | | | Total Assets/liabilities | | | | | |
| | | | | | Net IIP (beginning of period) | | | | | |
| Accumulation accounts (by sector/functional category) | | | | | | | | | | |

| Transactions from BOP's financial account | | | | | | | | | | |
|---|-----------------------|--------------------|------------------------|---------------------------|--|---------------------------|------------------------|--------------------|-----------------------|---------------|
| | | | | | Changes in assets/liabilities due to transactions | | | | | |
| Other changes in financial assets and liabilities accounts | | | | | | | | | | |
| Revaluations (with same breakdown as in Table 7.1) | | | | | | | | | | |
| | | | | | Changes in assets/liabilities due to revaluations | | | | | |
| Other changes in volume (with same breakdown as in Table 7.1) | | | | | | | | | | |
| | | | | | Changes in assets/liabilities due to other changes in volume | | | | | |
| Assets (end of period) | | | | | Liabilities (end of period) | | | | | |
| Total economy | Households and NPISHs | General Government | Financial corporations | Nonfinancial corporations | By functional category | Nonfinancial corporations | Financial corporations | General Government | Households and NPISHs | Total economy |
| | | | | | Direct investment | | | | | |
| | | | | | Portfolio investment | | | | | |
| | | | | | Financial derivatives | | | | | |
| | | | | | Other investment | | | | | |
| | | | | | Reserve assets | | | | | |
| | | | | | Total Assets/liabilities | | | | | |
| | | | | | Net IIP (end of period) | | | | | |

Note: This table is expository; for Standard Components, see Annex 14.

IIP = international investment position; NPISHs = nonprofit institution serving households.

Memorandum items:

Fair value of loan assets (or nominal value of nonperforming loan assets)

Short-term reserve-related liabilities

Currency composition

These guides are based on the same core principles, with additional elements including more detail, alternative valuations, discussion of implementation issues, and additional items, such as contingencies, guarantees, and other off-balance-sheet items.

1. Definition of economic assets

Reference:

2025 SNA, Chapter 11, Capital Account.

7.10 The IIP covers the subset of financial assets and liabilities that have an external character. In most cases, the external character of a financial asset or liability arises because, of the two parties, one is a resident and the other is nonresident. The gold bullion component of monetary gold is the only case of a financial asset with no counterpart liability; its external character arises from the historical role of gold in the international financial system. The scope and definitions of different types of economic assets is given in paragraphs 5.2–5.14.

7.11 The concept of ownership of assets in the IIP is based on economic ownership, as defined in paragraph 3.41. *The economic owner of the asset is the party who bears the risks and receives the benefits of ownership.* Ownership of financial assets can be complex in some legal arrangements, for example, the lessor under a financial lease has the legal title, while the lessee has most of the risks and benefits of ownership. (For further details on financial leases, see paragraphs 5.56–5.59 and 7.57.)

2. Classification

7.12 Possible dimensions for the classification of the IIP are:

- (a) Functional category—direct investment, portfolio investment, financial derivatives (other than reserves) and employee stock options (ESOs), other investment, and reserve assets, as defined in Chapter 6;
- (b) Financial instrument—according to the broad groupings (equity and investment fund shares, debt instruments, and other financial assets and liabilities) or the full breakdown, as defined in Chapter 5;
- (c) Institutional sector of resident party—at least, central bank, deposit-taking corporations except the central bank, general government, other financial corporations, nonfinancial corporations, households and NPISHs, as defined in Chapter 4, Section D. Additional subsectoring or supplementary “of which” items of the financial and nonfinancial corporations sectors may be undertaken following Table 4.4;
- (d) Maturity (in the case of debt instruments)—short-term or long-term, by original and remaining maturity, as defined in paragraphs 5.103–5.105;
- (e) Currency—domestic or foreign currency, as defined in paragraphs 3.95–3.97 for debt and 3.100 for equity; and (in the case of financial derivatives) to receive or pay foreign currency, as defined in paragraph 5.108; and
- (f) Interest rate structure (in the case of debt instruments)—variable- or fixed-rate, as defined in paragraphs 5.109–5.114.

The Integrated IIP could be presented following the first three dimensions. Sector, maturity, and currency are relevant to studies of sustainability, vulnerability, and exposure to exchange rate changes (after taking into account any hedging). The remaining maturity is important to the debtor, but it is less relevant for the creditor with liquid instruments, in that the assets can be sold before maturity. In addition to the institutional sector of the resident party, as in (c), the institutional sector of

nonresident counterparty may also be of interest in some cases (e.g., governments may wish to distinguish between other governments, international organizations, and other sources of their borrowing).

7.13 A consistent classification should be used as far as possible for the IIP and other related accounts. The stock of financial assets and liabilities, financial account transactions, and other changes in financial assets and liabilities all relate to the same instruments, so a consistent classification is necessary for a comprehensive analysis of relationships between them. Similarly, a consistent level of detail for income (and possibly holding gains or losses, for some purposes) and positions allows the estimation of rates of return. Although the external accounts functional classification of financial assets and liabilities is not used in the *SNA* or financial statistics, the instrument and institutional sector classifications are the same. The inclusion of instrument and sector detail in integrated IIP data facilitates understanding and checking the linkages with other data sets such as monetary and financial statistics.

B. Direct Investment

7.14 Direct investment is defined in paragraphs 6.8–6.24. Other aspects of direct investment are covered in paragraphs 6.25–6.41. Direct investment standard components are presented by instruments (equity and debt instruments) and resident institutional sectors. Presentation based on the relationship between the investor and the entity receiving the investment is included under memorandum items. The directional principle presentation of direct investment can be used in the IIP on a supplementary basis, as discussed in paragraphs 6.42–6.45 and Box 6.4.

Other specific issues concerning direct investment in the IIP are discussed in the following paragraphs.

1. Valuation of unlisted and other equity

References:

OECD, *OECD Benchmark Definition of Foreign Direct Investment*, fifth edition.

IMF, *Coordinated Direct Investment Survey Guide 2015*.

7.15 Shares and other equity can be readily valued at their current prices when they are regularly traded on stock exchanges or other financial markets. However, there may be no observable market prices for positions in equity not listed on a stock exchange (i.e., items (b) and (c) in paragraph 5.24). This situation often arises for direct investment enterprises, private equity, equity in unlisted and delisted companies, listed but illiquid companies, joint ventures, and unincorporated enterprises.

7.16 When actual market values are not available, an estimate is required for measuring the equity of unlisted corporations at market-equivalent prices. This *Manual* prescribes three preferred methods for estimating market value: a) own funds at book value (OFBV); b) recent transaction price; and c) market capitalization or Price to book Value (P/B).

(a) Own funds at book value. This method for valuing equity uses the value of the enterprise recorded in the books of the direct investment enterprise, as the sum of (a) paid-up capital (excluding any shares on issue that the enterprise holds in itself and including share premium accounts); (b) all types of reserves identified as equity in the enterprise's balance sheet (including investment

grants when accounting guidelines consider them company reserves); (c) cumulated reinvested earnings; and (d) holding gains or losses included in own funds in the accounts, whether as revaluation reserves or profits or losses. The more frequent the revaluation of assets and liabilities (at least, on an annual basis), the closer the approximation to market values. Data that are not revalued for several years will likely be a poor reflection of market values.

- (b) Recent transaction price. Unlisted instruments may trade from time to time, and recent prices, within the past year, at which they were traded may be used. Recent prices are a good indicator of current market values to the extent that conditions are unchanged. This method can be used as long as there has been no material change in the corporation's position since the transaction date. Recent transaction prices become increasingly misleading as time passes and conditions change.
- (c) Market capitalization method. Book values reported by enterprises can be adjusted at an aggregate level by the statistical compiler. For untraded equity, information on "own funds at book value" (see paragraph 7.16(e)) or other indicators of corporate performance can be collected from enterprises, and then adjusted with ratios based on suitable price indicators, such as the ratio to market capitalization to book value for listed companies in the same economy with similar operations. Alternatively, assets that enterprises carry at cost (such as land, plant, equipment, and inventories) can be revalued to current period prices using suitable asset price indices.

7.16-1 Compilers should maintain transparency and state clearly the method(s) used, preferably in the metadata of these statistics. Methods for valuation of direct investment equity positions are discussed in more detail in the *OECD*

Benchmark Definition of Foreign Direct Investment, fifth edition (paragraphs xx). In addition, the *BPM7 Compilation Guide* will provide practical guidance on the implementation of different methods including a decision tree that serves as a complement for compilers to clarify the alternative methods available for the valuation of unlisted equity depending on the information available. These methods may also be useful for valuation of other unlisted equity securities and other equity.

7.17 In cases in which none of the above methods are feasible, less suitable data may need to be used as data inputs. For example, cumulated flows or a previous balance sheet adjusted by subsequent flows may be the only sources available. While these methods are not recommended, because these sources use the prices of previous periods they should at least be adjusted for subsequent price developments, for example, by using aggregate share price or asset price indexes and by taking into account exchange rate movements, where relevant. Unadjusted summing of past transactions should not be used. Equity represents owners' funds. The means through which equity can be generated may take various forms, such as share issues, equity injections without any commensurate issue of shares (sometimes called "contributed surplus" or "capital contributions"), share premiums, accumulated reinvested earnings, or revaluation. Although these categories should be taken into account when cumulated flows are used to measure the value of equity, the different categories are all components of equity and need not be identified separately.

7.19 The valuation methods for unlisted equity recommended in paragraph 7.16 can lead to negative values. This is in particular true for OFBV and market capitalization valuation methods. Recent transaction prices will usually not be negative if the investor is not liable for any losses exceeding the capital invested in

the enterprises. Box 7.1 provides guidance on the treatment of negative equity positions.

Box 7.1. Treatment of Negative Equity Positions

This *Manual* recommends recording negative equity positions for unlimited liability entities⁴ if the valuation methods for unlisted equity result in such values. With regards to limited liability entities,⁵ it is recommended to record negative equity positions as the default option and compilers could only zero out negative positions in specific cases where the shareholders' and their affiliates' liability is strictly limited.

In this regard, strictly limited liability is referring to a situation where the shareholder would not suffer any other direct economic losses than the existing equity investment in case of bankruptcy and would not be likely to take on any financial obligations due to the absence of implicit guarantees or significant reputational risks. Examples of other direct economic losses include loan losses and the realization of guarantees, while the willingness to assume new financial obligations could be related to reputational, societal, or other reasons.

It can generally be assumed that implicit guarantees or significant reputational risks exist when a shareholder's ownership share is at least 10%. This implies that negative direct investment equity positions should not be zeroed out unless a direct investor has no legally binding economic obligations, except for the existing equity investment, and a history of not assuming any new financial obligations in the event of bankruptcy or termination of its direct investment enterprises.⁶

Negative equity positions in public corporations and central banks should never be zeroed out. Compilers are encouraged to show negative equity positions as supplementary "of

⁴ Unlimited liability entities are business structures where the owners or partners are personally liable for all the debts and obligations of the business. In these business structures, there is no legal separation between the business and the owners/partners, so the owners' personal assets are at risk if the business fails or faces legal action.

⁵ Limited liability entities are business structures where the owners' liability is limited to the amount of their investment in the company. This means that the personal assets of the owners are generally protected from the debts and obligations of the business.

⁶ In case some shareholders are zeroed out while others are not, the latter would only record negative equity proportional to their ownership share.

which” items under equity assets and liabilities. Further, stock-flow consistency should be ensured through the recording of revaluations rather than other changes in the volume of financial assets and liabilities if negative equity is zeroed out.

2. Entities that borrow on behalf of their affiliates

Reference:

OECD, *OECD Benchmark Definition of Foreign Direct Investment*, fifth edition.

7.20 An entity resident in one economy may borrow funds on behalf of affiliated enterprises in one or more other economies. The affiliates may include holding companies, parent companies, direct investment enterprises, and fellow enterprises. Examples include SPEs which may be used to undertake the borrowing, or an entity with substantial activities of its own may do the borrowing. In these cases, the liability is always guaranteed by the parent or a fellow enterprise, explicitly or implicitly, in whole or in part. Alternatively, the affiliated enterprise may commit future revenue streams. Regulatory or taxation benefits may be factors behind such arrangements. In these cases, the creditor records a claim on the entity that directly undertakes the borrowing. That is, the creditor does not show its claim as being on the enterprise that ultimately receives the funds or makes the guarantee.

7.21 When funds raised are passed on by the borrowing entity to an affiliated enterprise, the initial borrowing entity has a claim on the affiliated enterprise. This arrangement can be assumed to give rise to a loan, unless there is evidence that it is a debt security or equity. This borrowing can arise for pass-through funds (discussed in paragraphs 6.33–6.34), conduits (paragraph 4.86), and SPEs and similar legal structures (paragraph 4.87). In many cases, such investment is reverse

investment or investment between fellow enterprises, as discussed in paragraphs 6.39–6.41 and 6.43, respectively.

7.22 Special rules apply to an entity owned or controlled by general government when that entity is resident in another territory and is used for fiscal purposes. These rules are discussed in paragraphs 8.24–8.26.

3. Quasi-corporations

7.23 The identification of institutional units for branches, notional resident units for ownership of land and natural resources, some joint ventures, and preparatory operations prior to incorporation and other quasi-corporations is discussed in paragraphs 4.26–4.49. The effect of the identification of such institutional units is that owners are shown as having a claim on the institutional unit, rather than as directly owning the various individual assets.

7.24 Owners' claims on quasi-corporations that are resident in other economies are usually classified as direct investment. In the rare cases in which the proportion of equity in land or a joint venture is less than 10 percent, the claim is classified as other investment—other equity and equity in international organizations as discussed in paragraph 6.62.

7.25 Equity in quasi-corporations should be valued as equal to the market value of the quasi-corporations' assets less the market value of liabilities other than equity to both residents and nonresidents. (This method would mean that quasi-corporations have no residual net worth). Alternatively, equity in quasi-corporations may be valued using one of the three preferred methods discussed in the above sub-section on valuation of unlisted equity.

4. Intercompany Lending in Debt Securities

7.25-1 Intercompany lending is discussed in paragraph 6.26-27. While the basic valuation method for debt securities component of intercompany lending is market value, it could be compiled at nominal value as a supplementary item in cases where the economy is significantly impacted by direct investment. Refer to “Additional Analytical Position Data” part of Annex 14 for further details.

C. Portfolio Investment

1. Equity with dividends declared payable but not yet paid

7.26 In market quotations, dividends declared payable but not yet paid are taken into account in the share price. After the point of time when ownership of shares is determined for the purposes of payment of dividends, the shares go “ex dividend.” (Ex dividend is the point at which the shares no longer carry the right to the most recently declared dividend. Thus, the dividend value becomes separated from the share price value and the share price falls to reflect the value of the dividend payout.) After that time, dividends declared should be included in accounts receivable/payable until payment is made.

2. Debt instruments with accrued interest

7.27 Accrued interest not yet paid on debt securities should be included in the outstanding amount of the financial asset or liability. Accrued interest not yet paid includes interest that has accrued and that is not yet due for payment or that is due for payment but in arrears. Accrued interest not yet paid should not be

reported separately (such as in other accounts receivable/payable). The market price of a debt security that includes interest that has accrued but is not yet payable is called the “dirty price” and is suitable for valuation of items in the IIP. In contrast, the market price of a debt security excluding the accrued interest not yet payable is called the “clean price” and requires accrued interest not yet paid to be added for use in the IIP. Methods of calculating the accrual of interest are discussed in paragraphs 11.48–11.76.

3. Short positions

7.28 Short positions occur when an institutional unit sells securities for which it is not the economic owner. For example, a security subject to a repurchase agreement may be on-sold by the security-receiving party (see paragraphs 5.52–5.54 on repurchase agreements). Delivery to the purchaser is made using a borrowed security. The party with the short position records a negative value for the holding of the asset. The short position is shown as a negative asset, rather than a liability.

7.28-1 This treatment reflects the economic ownership in that the holder of the negative position is exposed to the risks and rewards of the security, in an equal and opposite way, as the party in a long position. In aggregate, the recording of a negative position overcomes the double counting of the security by both the economic (original) owner and the final owner (the party who bought the borrowed security) and helps present consistent debtor-creditor relationship at a global level. Reverse transactions may be sequenced in a long chain of transactions and positions using the same security. Annex 7 (Table 4) explains the recording of on-selling securities that are acquired under repo or security lending in the financial account and IIP.

4. Unlisted debt and equity securities

7.29 Positions in unlisted portfolio investment equity securities without an observable market price may be valued using methods discussed in section B.1 for direct investment equity. Some listed debt securities also may have no quoted prices, for example, if the market is illiquid or the security ceases trading due to suspension, default, or bankruptcy. In such cases, they may function similar to unlisted debt securities in terms of valuation and marketability, despite being initially listed. A market price can be estimated for such debt securities by discounting future cash flows using a discount rate that takes into account the risk of default (present value approach).

5. Debt securities at nominal values

7.30 Whereas the basic valuation method for debt securities is the market value, their compilation at nominal value is encouraged as a supplementary item. The nominal value of debt securities is a useful measure of value from the viewpoint of the debtor, because at any moment, it reflects the present value of amounts owed to the creditors (i.e., sum of funds originally advanced, plus any subsequent advances, plus any interest that has accrued, less any repayments) (see paragraphs 3.xx-xx for additional details on nominal valuation). This *Manual* emphasizes the compilation of a table on reconciliation between nominal and market valuation of debt securities liabilities as part of the “Additional Analytical Position Data” in Annex 14 on the lines of *External Debt Statistics: Guide for Compilers and Users 2014*. In cases where the data on debt security holdings at nominal value are relevant for the economy, the nominal value of the total amount of assets in debt securities may be included in the supplementary table, next to liabilities. For the

definition of nominal value and related explanation, refer to the *Annex: Methods to Value Transactions and Stocks, Chapter 3*.

6. Zero-coupon and deep-discount bonds

7.31 A zero-coupon bond has a single payment at maturity and no coupon payments. The bond is sold at a discount from face (or par) value, and at maturity, an amount equal to face value is repaid. The difference between the discounted issue price and the face value reflects the market rate of interest at the time of issue—the longer the maturity of the bond and the higher the market interest rate, the greater the discount against the face value. The accrual of interest on zero-coupon bonds is discussed in *paragraph 11.55 and is illustrated in Box 11.2*.

7.32 A deep-discount bond is a bond that has small or no coupon payments and is issued at a considerable discount to face value. Like the zero-coupon bond, the difference between the issue price and face value accrues as interest over the life of the bond, and the market value of the bond increases as the interest accrues. The accrual of interest on deep-discount bonds *is discussed in paragraph 11.56*.

D. Financial Derivatives (Other Than Reserves)⁷ and Employee Stock Options (ESO)

7.33 Financial derivatives and ESOs are valued at market prices prevailing on balance sheet recording dates. If market price data are unavailable, other fair value methods (such as option models or present values) may be used to value them.

⁷ A central bank swap arrangement that has the characteristics of a standard (market priced) swap contract involves an exchange of deposit with the simultaneous creation of a financial derivative (refer to paragraphs 6.xx-xx for additional details).

Compilers are generally constrained to use the parties' own accounts. When payments are made before the derivative contract expires (such as payments in interest swaps), the change in the value of the contract is recorded as transactions.

7.34 .

7.35 A key characteristic of many derivative contracts is that the counterparties make commitments to transact, in the future and at agreed-on prices, in underlying items. The present value (or market price) of a financial derivative is derived from the difference between the agreed-on contract price of an underlying item and the prevailing market price (or the market price expected to prevail), appropriately discounted, for that item. For options, the price depends on the potential price volatility of the underlying instrument, the time to maturity, interest rates, and the difference between the strike price and the market price of the underlying item. The counterpart liability is attributable to the writer of the option and is valued at the current cost of buying out the rights of the option holder. For a warrant, the counterpart liability of the issuer is the current outlay required to buy out the exercise rights of the holder. The value of a credit default swap is determined by the difference between the present value of the series of premium payments and the estimated present value of the potential payments in the event of default. The value of a swap contract is derived from the difference, appropriately discounted, between expected gross receipts and gross payments.

7.36 The market value of financial derivative contracts except for standard option contracts can switch from an asset position to a liability position (and vice versa) between reporting dates. The switch is a result of movement in the price of the underlying item(s) from which the value of the derivative contract is derived. When a switch in position occurs (and there are no settlement payments), the market value of the gross asset or liability position at the close of the previous accounting period is

revalued to zero, and the gross liability or asset position is revalued from zero to the market value at the end of the present accounting period.

7.37 Gross asset and gross liability data should be compiled by summing, respectively, the values of all individual contracts in asset positions and the values of all individual contracts in liability positions. Notional values of financial derivatives are presented according to the formats shown in **Appendix 14, Tables I–III**. *The notional value (sometimes called notional amount or nominal amount) of a financial derivative is the amount underlying a financial derivative contract that is necessary for calculating payments or receipts on the contract.* This amount may or may not be exchanged. The notional values are useful for analysis because they provide information about the risk exposure and assist in understanding the link between financial derivatives and the underlying to which they relate.

- **7.37-1** Any value changes in financial derivatives are classified as revaluations and are included in the other changes in financial assets and liabilities account (*BPM7, paragraph 6.xx*). For financial derivatives that include a foreign exchange risk, the steps for separating exchange rate and other revaluations—as stated in paragraph 9.28—are not applicable. In those cases, a valuation change due to exchange rate changes can arise even in the currency of denomination of the instrument. In some cases, such as cross-currency swaps that are also interest rate swaps, it may not be practical to separate exchange rate revaluations from other revaluations. The convention is that all revaluation effects are due to price revaluations.

7.38 Cumulation of transactions should never be used to estimate financial derivative positions. Transactions relate largely to those in option-type contracts and to settlements. Settlements eliminate positions, while the value of derivatives positions emerges largely from revaluations.

7.39 ESOs are valued consistently with the cumulated remuneration of employees until the vesting date (see paragraphs 11.20–11.21); thereafter, they are valued at market prices (see paragraph 9.30). ESOs can be measured from a market value of equivalent options or according to an options-pricing model, such as Black-Scholes. International accounting standards give guidance on methods, and recording in the external accounts normally will follow business accounts.

E. Other Investment

1. Valuation of nonnegotiable instruments

a. Nominal value

7.40 Nonnegotiable instruments include loans, deposits, and other accounts receivable/payable. The primary valuation for positions in these instruments is nominal value, which is defined in paragraph 3.88. In the case of other equity and equity in international organizations included in other investment, the valuation methods applicable to unlisted direct investment equity may be used, as discussed in section B.1.

7.41 Accrued interest not yet paid should be included in the outstanding amount of the financial asset or liability, rather than being classified separately (such as in other accounts receivable/payable). Accrued interest not yet paid also includes implicit financial services on loans and deposits accrued and not yet paid.

7.42 Nominal values are not adjusted for expected losses or for changes in interest rates. The market value may differ from the nominal value primarily due to changes in market interest rates and the possibility that some liabilities may not be

repaid. The possible divergence between nominal and market values arises for loans, but it can also arise for deposits and other accounts receivable/payable.

7.43 The use of nominal values for some nonnegotiable instruments, instead of market-equivalent values, in the IIP is partly influenced by pragmatic concerns about data availability and also by consistency in reporting by debtors and creditors. Nominal valuation is also useful in its own right, however, because it shows actual legal liability and the starting point of creditor recovery behavior.

7.43-1 In the case of loans with concessional interest rates, positions are valued at nominal value based on the contractual interest rate, similar to any other loans. Concessional lending is discussed in paragraph 13.51/Annex 2.

7.44 The nominal value can be reduced by a write-off, restructuring, or debt forgiveness:

- Liabilities are canceled or written off, in part or in full, by the creditor as uncollectible, usually because of the bankruptcy or liquidation of the debtor, or other factors such as a court order as discussed in paragraphs 9.8–9.11.
- In a formal debt reorganization, the old liability is regarded as being extinguished and a new liability created. (See Annex 2, Debt Reorganization and Related Transactions.)

7.44-1 While the basic valuation principle for positions in loans is nominal value, when there is evidence of loan deterioration due to publicly known events (e.g., in the context of bank recovery operations) value reset—even beyond the cases of bankruptcy and liquidation, or court decisions—is recommended. Specific guidance on the situations when values should be reset and the criteria to be applied will be provided in the *BPM7 Compilation Guide*.

b. Additional data on loans and other nonnegotiable instruments

7.45 While nominal value is the primary valuation method for nonnegotiable instruments, it provides an incomplete view of the financial position of the creditor, particularly in cases in which the instruments are impaired. Consequently, additional items are included for loans to give additional information. The possible items are:

- (a) fair value,
- (b) nonperforming loans, and
- (c) loan loss (bad debt) provisions.

These items are discussed in paragraphs 7.48–7.53. Data on debt in arrears are discussed in paragraphs 5.99–5.102. These are alternative indicators that can be used to assess the effect of impairment⁸ and other variations between nominal values and market-equivalent values. Fair value expresses a market-equivalent valuation of the position. Nonperforming loans indicate the value of the loans that are impaired, and loan loss (bad debt) provisions show amounts that are deducted from the nominal value to account for expected losses in business accounts.

7.46 The fair value of loans is shown as a memorandum item for creditors. If fair value data for loans are not available, the nominal value of nonperforming loans should be provided as a memorandum item. These memorandum items are included for assets but not for liabilities. If fair value data are available, nonperforming loans is

⁸ For a financial asset, a loss in its future economic benefits or service potential.

a supplementary item. Data on loan loss (or bad debt) provisions and arrears also may be provided on a supplementary basis.

7.47 The same issue of impairment arises for deposits and trade credit. For example, an insolvent bank may have closed its doors, so that its deposits may be worth less than their nominal value, so alternative measures for deposits and trade credit may be prepared, where relevant.

c. Fair value

Reference:

International Financial Reporting Standards, International Accounting Standard 39
Financial Instruments: Recognition and Measurement.

7.48 *Fair value is defined as the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's-length transaction. That is, fair value represents a market-equivalent value, namely, an estimate of what could have been realized if the creditor had sold the loan. It is the preferred indicator of the effect of loan impairment as it represents an attempt to measure the realizable value. The fair value of loan assets is shown as a memorandum item for assets, where available.*

7.49 The calculation of fair value takes into account expected loan losses. In addition, in the case of fixed-rate loans, it takes into account changes in market interest rates. In practice, the availability of fair value estimates of loans is limited by business accounting practice. A recent transaction in the loan or one of similar term, credit risk, and so on provides a good guide to the fair value. As the time since the transaction becomes longer and conditions change, such transactions values become historic prices and not market-equivalent values.

d. Nonperforming loans

7.50 *Nonperforming loans are defined as those for which:*

- (a) payments of interest and/or principal are past due by 90 days or more, or*
- (b) interest payments equal to 90 days or more have been capitalized or delayed by agreement,⁹ (reinvested into the principal amount) or*
- (c) evidence exists to reclassify a loan as nonperforming even in the absence of a 90-day past due payment, such as when the debtor files for bankruptcy.¹⁰*

7.51 Nonperforming loans are recorded at nominal value, which allows them to be compared with the total value of loans at nominal value. The value should include accrued interest not yet paid. Loans continue to be included in nonperforming loans until written off (see paragraphs 9.8–9.11), forgiven (see paragraphs 13.22–13.23), reorganized (see paragraph 9.29 and Appendix 2), or they become performing loans.

7.52 The 90-day criterion is the time period most widely used, although other periods are used. When the standard definition of nonperforming loans is not used, other definitions based on regulatory frameworks are acceptable. Because identification of nonperforming loans is a bank regulatory concept, it may not be used widely by other creditors. The nominal value of nonperforming loan assets is a memorandum item when loan assets at fair value are not available; otherwise, it is a supplementary item.

⁹If the loan is rescheduled, it is classified as a new instrument (see paragraph 7.53). Rescheduling interest arrears is not sufficient for the loan to have been considered rescheduled, see paragraph A2.12.

¹⁰See *Financial Soundness Indicators Compilation Guide 2019*, paragraph 5.94.

7.53 Information on replacement loans may be provided in addition to nonperforming loans. Replacement loans include loans arising from rescheduling or refinancing the original loan and loans provided to make payments on the original loan. Although these loans may be granted on “easier” than normal commercial terms, provided the terms and conditions of the replacement loan are complied with by the debtor, and subject to national supervisory guidance, the replacement loan is not classified as nonperforming.

e. Loan loss provisions

7.54 Loan loss provisions, also called bad debt provisions, are internal accounting entries made by creditors to take into account possible loan losses. These provisions may be used as an indicator of the difference between nominal values and fair values. As explained in Chapter 5 (paragraph 5.14), provisions are not treated as liabilities in the ESS,¹¹ because they are not the subject of the sort of (legal) contractual obligations associated with a liability. International accounting standards allow for various approaches to derive these provisions, so procedures may differ between enterprises and between economies. Loan loss provisions may vary from the loss of value of nonperforming loans, for example, because there is adequate collateral for a nonperforming loan, or there is an expectation that a proportion of performing loans will default later.

¹¹ Comprise all the datasets related to the external accounts including the balance of payments, the international investment position, external debt statistics, international reserves and foreign currency liquidity, the Coordinated Direct Investment Survey, and the Coordinated Portfolio Investment Survey.

f. Deposits and other accounts receivable/payable

7.55 Positions in deposits and other accounts receivable/payable give rise to the same issues of nominal and fair values as loans. For example, deposits may be held at a bank in liquidation, or trade credit liabilities may include those owed by insolvent debtors. These instruments should be recorded at their nominal value. However, if there is a significant difference between the nominal and fair value, indicators similar to those for loans should be shown as supplementary items.

g. Metadata on indicators of impairment

7.56 In view of the range of options concerning measures of impairment of loans and other nonnegotiable instruments, it is particularly important that metadata provide information on the definitions and sources used. As accounting procedures become more widely standardized, more prescriptive guidance may be given in statistical manuals for the adoption of particular indicators of impairment of loans.

2. Financial leases

7.57 A financial lease is defined in paragraph 5.56. The treatment of financial leases is designed to capture the economic reality of the arrangements. It moves away from the legal form by treating goods under a financial lease as if they were purchased and owned by the user. The financial lease is shown as a loan from the lessor to the lessee that is used to finance the acquisition of a fixed asset by the lessee. Financial leases affect goods, services, income, financial transactions, and positions.

3. Recording of positions associated with securities repurchase agreements and other reverse transactions

7.58 *Reverse transactions are contractual arrangements that involve a change of legal ownership of securities, gold, or other assets (e.g., commodities) with a commitment to repurchase the same or similar securities, gold or other assets, either on a specified date or with open maturity.* They include securities repurchase agreements, gold swaps, securities lending, and gold loans. The commitment to reverse the change in legal ownership in the future at a fixed price means that the original owner retains the risks and rewards of changes in the price of the asset. Accordingly, there is considered to be no change of economic ownership of the security or gold, so no transaction in that security or gold is recorded, and ownership of the asset as shown in the IIP is unchanged.

7.59 A reverse transaction may be with or without the supply of cash. If cash is supplied, as in a repurchase agreement (repo or securities lending with cash collateral), and in return the other party supplies securities, the arrangement is regarded as giving rise to a loan or deposit. (The classification of the cash supplied is discussed **in paragraphs 5.52–5.54.**) Analogously to repos, a gold swap for cash is treated as being a loan with the gold as collateral, and there is no change in the economic ownership of the gold.

7.60 There may be problems in attributing securities ownership when using custodians as a data source, because custodians may not know whether securities being held are under a repurchase agreement or not.

7.61 If a party that receives securities under a reverse transaction on-sells the securities to a third party, then it has a short position. The treatment of short

positions is discussed in paragraph 7.28. Fees payable to one of the parties under a reverse transaction are discussed in paragraphs 11.67–11.68.

7.61-1 Repurchase agreements, securities lending with cash collateral, and margin lending can be used to obtain short-term financing. Separate information on these types of loans helps in analyzing the degree to which financial corporations are involved in liquidity transformation and in creation of additional leverage. Therefore, data on repurchase agreements, securities lending with cash collateral, and margin lending may be provided as an “of which” supplementary item under loans.

4. Overnight deposits

7.62 Overnight deposits (or sweep accounts) involve funds that are moved back and forth overnight. In some cases, these overnight accounts are held in another economy. The funds are returned at the beginning of the next working day and may then be moved back at the close of business. Positions should be measured after funds are moved at the end of the day. The calculation of major statistical aggregates—including external asset and liability positions and financial transactions—can differ substantially depending on whether they are measured before, or after, funds are moved. By measuring positions and transactions after the funds have been moved, consistency is ensured between the measure of interest flows and of positions. In addition, major data users are interested in the size and location of these stocks and flows for risk assessment and other purposes.

5. Insurance technical reserves, pension and annuity entitlements, and provisions for calls under standardized guarantees

7.63 These reserves include:

- (a) nonlife insurance technical reserves
- (b) entitlements of beneficiaries under life insurance policies and pension schemes;
and
- (c) provisions for calls under standardized guarantees.

7.63-1 Nonlife insurance technical reserves consist of prepayment of insurance premiums less service charges and reserves for outstanding claims (both reported claims and for claims incurred and not reported) for nonlife insurance. Equalization reserves (explained further in [paragraph 5.64\(b\)](#)) for events that have occurred are included, whereas reserves for events that have not occurred are excluded.

7.64 Insurance technical reserves, pension and annuity entitlements and provisions for calls under standardized guarantees are regarded as liabilities of the insurance companies and pension funds, and assets of the policyholders and beneficiaries. For economies that are major insurance service exporters or importers, cross-border insurance reserves may be significant. For economies that are major sources or destinations of cross-border workers or that are sources or destinations for retirees who change residence, life insurance and pension entitlements may be important elements of the IIP. Insurance technical reserves may be classified as direct investment in the cases discussed in [paragraph 6.27](#).

7.64-1 A discussion on Islamic insurance (*Takaful*) and re-insurance (*Re-takaful*) including their reserves as well as similarities and differences with conventional insurance is provided in chapter 17 Islamic Finance.

7.65 The nature of the pension entitlement liabilities of the pension funds and the corresponding asset of the beneficiaries depend on the nature of the pension plan:

- (a) *A defined contribution scheme is one in which the benefits payable to the beneficiary on retirement are defined exclusively in terms of the level of the funds built up from the contributions made over the beneficiary's working life and the increases in value that result from the investment of these funds by the manager of the pension scheme. The entire risk of the scheme to provide an adequate income in retirement is thus borne by the beneficiary. The liability of a defined contribution scheme, and the corresponding assets of the beneficiaries, are equal to the current market value of the assets of the fund, including any claims on the scheme's sponsor. Defined contribution plans are always funded.*
- (b) *A defined benefit scheme is one in which the benefits payable to the beneficiary on retirement are determined by an actuarial formula related to the participants' length of service and salaries. The liability of a defined benefit scheme (including nonautonomous pension funds and unfunded pension schemes), and the corresponding assets of the beneficiaries, are calculated by estimating the present value of the future benefits using actuarial estimates of the expected life length of the beneficiaries. In defined benefit schemes, benefits to the policyholder are guaranteed, but the scheme may be (partially) funded or unfunded. (See paragraphs 5.66–5.67 for more detail about pension entitlements as a financial instrument.)*

7.67 Provisions for calls under standardized guarantees are calculated in a similar way as described for nonlife insurance technical reserves. They are equal to the present value of expected calls under outstanding guarantees, net of any recoveries the guarantor expects to receive from the defaulting parties.¹²

7.68 To the extent that these reserves, entitlements, and provisions are measured from the accounts of insurance companies, pension schemes, and issuers of standardized guarantees, they may need to be split between liabilities to residents and nonresidents according to a suitable indicator such as premiums payable. The priority attached to the estimation of cross-border proportions of insurance reserves depends on their significance in each economy.

F. Reserves

7.69 At the appropriate reference dates, reserve assets are valued primarily at current market prices. Monetary gold is valued at the prevailing market price, SDRs are valued at market rates calculated by the IMF, and deposits and loans are valued at nominal values.

7.70 SDR holdings are a reserve asset, while the allocation of SDRs to IMF members is shown as the incurrence of a liability by the recipient and included in other investment. Therefore, for an economy that holds only its original allocation, its reserve assets are increased by the value of SDR holdings, but its net IIP is unchanged.

¹²These amounts may represent an overstatement of the assets and liabilities. For example, financial institutions make 1,000 loans of 20 units each that are covered by standardized guarantees, of which estimated claims are 200. The combined assets (and combined liabilities) of all the parties involved would be shown as 20,200, consisting of 20,000 loans and 200 in expected calls under the guarantees, even though only a maximum of 20,000 could ever be realized. The overstatement arises because the loans are recorded at nominal value.

7.71 Reserve-related liabilities are shown as a memorandum item to the IIP on a short-term (remaining maturity) basis (see Annex 14, Table V). They are defined in paragraphs 6.115–6.116. A comprehensive picture of foreign currency assets and liabilities of monetary authorities and central government, including positions with residents as well as nonresidents, can be presented according to the format in Table V in Annex 14.

7.72 Positions with the IMF include reserve assets, reserve-related liabilities, other investment, and off-balance-sheet liabilities (these are elaborated in Annex 9).

7.73 Some governments have large special purpose government funds—usually known as sovereign wealth funds—as discussed in paragraphs 6.93–6.98. Some of these assets may be included in reserve assets or possibly in other functional categories. Where such a fund is significant, the special purpose government fund's foreign assets not included in reserve assets can be shown separately as supplementary items.

G. Off-Balance-Sheet Items

7.74 As noted in paragraphs 5.10–5.14, some actual and potential obligations are not recognized as liabilities in the IIP. Examples include potential liabilities under one-off guarantees, unfulfilled loan commitments, and other explicit contingent liabilities (for further discussion, see Chapter 9, Contingent Liabilities, of *External Debt Statistics: Guide for Compilers and Users* 2014). If such obligations to nonresidents are significant, compilers should provide supplementary data in terms of the maximum exposure loss by type of contingent liability.

(Moved to Annex 9)

Chapter 8. Financial Account

Chapter 8 Financial Account

A. Concepts and Coverage

Reference:

2025 SNA, Chapter 12, Financial Account.

8.1 *The financial account records all transactions in financial assets and liabilities that take place between residents and nonresidents.* The financial account indicates the functional categories, sectors, instruments, and maturities used for net international financing transactions. The financial account is classified according to the instrument and functional categories, as discussed in Chapters 5 and 6, respectively. Table 8.1 shows some main headings in the financial account. The left-hand column of Table 8.1 shows the net acquisition of financial assets, and the right-hand column shows the net incurrence of liabilities. In the presentation in Table 8.1, assets are shown before liabilities, in accord with the order used in the IIP and general practice. (However, if the double-entry recording for the balance of payments as a whole needs to be emphasized, the liabilities could be shown in the first column. That presentation would be consistent with corresponding entries being on opposite sides of the accounts—e.g., a current account credit/revenue usually has an increase in financial assets or reduction in liabilities as its corresponding entry.)

8.2 Entries in the financial account can be corresponding entries to goods, services, income, capital account, or other financial account entries. For example, the corresponding entry for an export of goods is usually an increase in financial assets, such as currency and

deposits or trade credit. Alternatively, a transaction may involve two financial account entries. Sometimes, the financial account transaction involves the exchange of one asset for another, for example, a bond may be exchanged for currency and deposits. In other cases, the transaction may involve the creation of a new financial asset and corresponding liability.

8.3 The overall balance on the financial account is called net lending/net borrowing. Net lending means that, in net terms, the economy supplies funds to the rest of the world, taking into account acquisition and disposal of financial assets and incurrence and repayment of liabilities. (Net borrowing means the opposite.) Despite the lending-oriented terms, net lending/net borrowing is a balance that takes into account transactions in equity, financial derivatives, and monetary gold, as well as debt instruments. Net lending/net borrowing can be derived from either the sum of the balances on the current and capital accounts (i.e., the sum of credits/revenues less the sum of debits/expenditures) or from the balance on the financial account (i.e., the sum of net acquisitions of financial assets less the sum of net incurrences of liabilities). In concept, the values should be equal.¹ For a surplus of credits/revenues over debits/expenditures in the current and capital accounts, there is a balancing net acquisition of financial assets and/or reduction of liabilities, which is shown in the financial account. Net lending/net borrowing of the external accounts is also equal to the net lending/net borrowing for the sum of the resident sectors of the national accounts.

8.4 It may be of interest to show balances for components of the financial account. For example, analysts may be interested in net transactions for each functional category—such as the balance of direct investment derived as net acquisition of direct investment assets less net incurrence of direct investment liabilities.

¹In practice, they may not be equal, and the difference should be recorded as a statistical discrepancy (see paragraph [2.24]).

8.5 The financial account and the other changes in assets and liabilities account show the contribution to changes between the opening and closing stocks of financial assets and liabilities. (This relationship is represented in the integrated IIP as shown in Table [7.1].) These linkages of the financial account with the IIP and other changes accounts are made more transparent by the use of consistent classifications.

8.6 As shown in Table 8.1, the financial account shows net acquisition of financial assets and net incurrence of liabilities. Net acquisition of financial assets contributes to net changes in financial assets, which is wider in that it includes changes resulting from other flows, as well as transactions. Similarly, net incurrence of liabilities contributes to net changes in liabilities.

| Table 8.1 Overview of the Financial Account | | |
|--|-------------------------------------|-------------------------------|
| | Net acquisition of financial assets | Net incurrence of liabilities |
| Direct investment | | |
| Portfolio investment | | |
| Financial derivatives (other than reserves) and employee stock options | | |
| Other investment | | |
| Reserve assets | | |
| <i>Total</i> | | |
| Of which: | | |
| Equity and investment fund shares | | |
| Debt instruments | | |
| Other financial assets and liabilities | | |
| <i>Net lending / net borrowing (from financial account)</i> | | |
| Note: This table is expository; for standard components, see Annex 14. | | |

Net recording

8.7 Net recording in the financial account means aggregations whereby all acquisitions of a particular asset or incurrences of a particular liability are netted against all disposals in the same asset type or repayments in the same liability type. However, changes in financial assets should not be netted against changes in liabilities, with the possible exception for financial derivatives noted in paragraph [8.34] and in the balancing item. To

illustrate the correct use of netting, acquisition of portfolio investment in equity is netted against the sales of that type of equity; new bonds issued are netted against redemption of bonds issued; but acquisition of bond assets is not netted against incurrence of bond liabilities. The net recording principle should be applied at the lowest level of classification of financial instruments, taking into account the functional category, institutional sector, maturity, and currency classifications, where applicable. In contrast to the net recording used in the financial account, the current and capital accounts are recorded on a gross basis, as explained in paragraph [3.113].

8.8 Net recording of flows in financial assets and liabilities are recommended in the external accounts for both analytical and pragmatic reasons. Financial markets are typified by large turnover. The focus of the financial account is on the net changes in each category of external financial assets and liabilities due to transactions. Also, gross reporting of data may not be possible for certain classes of units and for some financial instruments.

Gross recording on a supplementary basis

8.9 Data on gross flows are useful for analyzing market turnover and market behavior, and for measuring service fees generated. Often, a small net value may be the outcome of large gross flows. Where practical to do so, data on drawings and repayments on loans or acquisitions or disposals of other instruments could be made available to users on a supplementary basis. The data could be provided comprehensively or only for particular components.

Timing and valuation

8.10 General principles for the time of recording for financial account entries are discussed in paragraphs [3.54–3.59]. Transactions involving financial assets are recorded when economic ownership changes. Some financial liabilities, such as trade credit and

advances, are the result of a transaction in nonfinancial items. In these cases, the financial claim is deemed to arise at the time the corresponding nonfinancial flow occurs.

8.11 In some cases, the parties to a transaction may perceive ownership to change on different dates because they acquire the documents evidencing the transaction at different times. This variation usually is caused by the time taken for delivery of documents and processing of transactions. The amounts involved in such “float” may be substantial in the case of transferable deposits and other accounts receivable/payable. If no precise date can be fixed, the date on which the creditor receives payment or some other financial claim can be adopted as a convention.

8.12 Financial account transactions in general are recorded at market prices, as discussed in paragraphs [3.68–3.80]. (Market prices are defined in paragraph [3.70].)

8.13 The price of financial instruments should be recorded exclusive of any commissions, fees, service charges, regulatory levies, and taxes, whether charged explicitly, included in the purchaser’s price, or deducted from the seller’s proceeds. Commissions and dealers’ margins, as discussed in paragraphs [10.120–10.123], are payable in return for the provision of financial services, so they should be excluded from the instrument price and included in services, where applicable. Therefore, the buyer and seller record financial account transactions, at the same mid-price, that is, the midpoint between the buyer’s price and the seller’s price.

B. Direct Investment

8.14 Direct investment is defined in paragraphs [6.8–6.24]. Specific issues in direct investment are discussed in the following paragraphs. Direct investment from direct investor to direct investment enterprise, reverse investment, and between fellow enterprises are identified separately. Presentation of direct investment financial flows

according to the directional principle is discussed in paragraphs [6.42–6.45] and Box [6.4].

1. Reinvestment of earnings

8.15 Reinvestment of earnings arising from a direct investor's equity in its direct investment enterprise is recorded as an imputed financial account entry. It is the corresponding entry and equal to reinvested earnings, which is an item in the earned income account (defined in paragraphs [11.33–11.36]; it is the direct investor's share of the retained earnings or net saving of the direct investment enterprise, before reinvested earnings payable are deemed distributed). The financial account entry is shown separately under direct investment equity.

8.16 Reinvestment of earnings may be negative in some cases, for example, in case of losses by the direct investment enterprise or if dividends payable in a period are larger than net earnings in that period. Just as positive reinvested earnings are treated as being an injection of equity into the direct investment enterprise by the direct investor, negative reinvested earnings are treated as a withdrawal of equity.

2. Dividends and withdrawal of equity[8.16a] The concept of superdividends does not apply to direct investment in the standard presentation because any distributions paid out of distributable income from the current period and accumulated retained earnings from previous periods are treated as dividends (see paragraphs [8.28a] and [12.XX]). However, distributions beyond that would not be included in dividends and should be recorded as withdrawals of equity (see also paragraphs [12.XX] and [12.XX]). Such distributions could be funded, for example, from the sale of assets. If a direct investment enterprise has more than one investor, the calculations should be made for each investor based on the ownership share.

3. Direct investment flows in kind

8.17 Goods, services, and other resources may be supplied by or to affiliated enterprises at above or below market prices, or with no payment. For example, a direct investor may supply machinery and equipment to its direct investment enterprise. When goods and services are supplied below cost by a direct investor to a direct investment enterprise, if there is no other indication about the motivation, it can be assumed to be for the purposes of building up the direct investor's equity in the direct investment enterprise. As discussed in paragraphs [3.77–3.78, 10.35, and 11.101–11.102], when such flows can be valued, the difference between the market value of the goods and services and the prices actually charged should in principle be recorded as direct investment equity transactions.

4. Mergers and acquisitions

8.18 Mergers arise when two or more companies agree to combine into a single operation. Acquisitions involve the purchase of one company or group of companies by another company or group of companies (though not all the shares may be acquired by the purchaser). Mergers and acquisitions data are not identified as standard components within direct investment. Nonetheless, there may be interest in such data because the nature of mergers and acquisitions may differ from other direct investment—for example, they may not provide any new financing for the firms involved but rather represent a change in investors. See *OECD Benchmark Definition of Foreign Direct Investment*, [Annex 9], which discusses the definition and collection of data on merger and acquisition transactions. Mergers and acquisitions can be differentiated from greenfield investment and extension of capacity, which are described in Annex 6.

5. Corporate inversion and other restructuring

8.19 *Corporate inversion describes the corporate restructuring of a multinational enterprise group such that the original ultimate controlling parent company in one economy becomes a subsidiary of the new parent in another economy. In addition, ownership of a group of enterprises may be shifted to the new parent company.* Such arrangements may also be called corporate relocations, headquarters relocations, or corporate restructuring. The process may take place over more than one period. Although corporate inversion has a comparable economic effect to a change of residence of the parent company (as discussed in paragraphs [4.167 and 9.21]), it differs in that inversion is achieved by transactions in assets between different entities, rather than by a single entity changing its residence. So, corporate inversion results in financial transactions being recorded in the financial account. However, some other types of restructuring may involve other changes in volume, for example, if corporations change residence. Corporate inversions are described in further detail in Annex 6, and data may be published on a supplementary basis.

6. Borrowing for fiscal purposes

8.24 Special rules apply to an entity owned or controlled by general government when that entity is resident in another territory and is used for fiscal purposes. Such entities are resident in their economy of incorporation or registration, and not in the economy of their owner (as discussed in paragraphs [4.134–4.135]). For example, a government may use a special purpose or other entity to issue securities to fund its expenditure. Fiscal purposes refers to the distinctive motivation of the general government sector, as discussed in paragraphs [4.91–4.92]. Fiscal purposes can be distinguished from commercial purposes because fiscal purposes are always oriented to serving the objectives for the government's home territory.

8.25 When an entity resident in one economy borrows on behalf of the government of another economy, and the borrowing is for fiscal purposes, the following entries are made:

- (a) At the time of borrowing: the borrowing entity records a liability in the instrument in which they borrowed, e.g., borrowing through issuance of bonds would result in an increase in debt security liabilities for the borrowing entity. The borrowing entity's claim on the government is imputed through a transaction creating a debt liability of the government equal to the amount of the borrowing, and in the same financial instrument as the debt incurred by the borrowing entity. The corresponding entry is an increase in the government's equity in the borrowing entity, matched by an increase in equity liabilities for the borrowing entity.
- (b) At the time funds (or resources acquired with the funds) are passed to the government (as applicable): the flow of funds is shown as a transaction, matched by a reduction of the government's equity in the borrowing entity by the same amount.
- (c) At the time expenses are incurred, revenues are made, or resources or funds are provided by the borrowing entity to a third party (i.e., are not passed to the government), where applicable: a transaction between the government and the entity is imputed, with the matching entry as a withdrawal or increase in the value of the government's equity. The imputed transaction should be recorded according to its nature, e.g., as interest expenditure on the imputed debt of the government, government revenue, current or capital transfer, or acquisition of assets in the government accounts.

These entries are made symmetrically for both the government and the borrowing entity. These entries do not affect the transactions or positions between the borrowing entity and its creditors or other third parties, which are recorded as they occur with no imputations.

8.26 The reason for having a special approach for government entities is that, unlike in the private sector, the nonresident entity undertakes functions at the behest of general government for public policy, not commercial purposes. Without this approach, a misleading picture of government expenditure, revenue, and debt could arise.

C. Portfolio Investment

8.27 Portfolio investment is defined in paragraphs [6.54–6.57].

1. Reinvestment of earnings in investment funds

8.28 Unlike other portfolio investment, the undistributed earnings of portfolio investment in investment funds are imputed as being payable to the owners and then as being reinvested in the fund. The financial account entry for reinvestment of earnings is the corresponding entry to the reinvested earnings of investment funds in the earned income account item (which is covered in paragraphs [11.37–11.39]). The treatment and calculation of earnings are the same as for reinvested earnings of direct investment enterprises. Reinvestment of earnings may be negative, for example, when a fund has paid dividends out of realized holding gains, or when earnings accrued over previous periods are paid as dividends.

2. Superdividends

8.28a In contrast to direct investment, the concept of superdividends applies to portfolio investment in the standard presentation where they are treated as withdrawal of equity. *Superdividends are large and irregular payments made by corporations to their shareholders or owners that are funded from accumulated reserves or sales of assets. If the distributable income is positive, the difference between the payment and the distributable*

income of the relevant accounting period is recorded as a superdividend under withdrawal of equity. The remainder of the payment (equal to the distributable income) is recorded as a dividend. If the distributable income is negative, the entire dividend payout is recorded as a superdividend under withdrawal of equity. Distributable income includes net income from the production of goods and services, net property income, and net transfers, and is described in further detail in paragraph [12.XX]. The calculations should be made for each investor based on the ownership share.

3. Convertible bonds

8.29 The classification of convertible bonds is discussed in paragraph [5.45]. When the option to convert the bond into shares is implemented, two entries are shown: (a) redemption of the bond and (b) the issue or acquisition of shares.

4. Debt defeasance

8.30 Debt defeasance allows a debtor (whose debts are in the form generally of debt securities and loans) to remove certain liabilities from the balance sheet by pairing irrevocably assets of equal value to the liabilities.

8.31 Defeasance may be carried out (a) by placing the paired assets and liabilities in a trust account within the institutional unit concerned, or (b) by transferring the assets and liabilities to another institutional unit. In the former case, there are no transactions with respect to defeasance, and the assets and liabilities should not be excluded from the balance sheet of the unit. In the latter case, the transactions by which the assets and liabilities are moved to the second statistical unit are recorded in the financial account of the economies concerned, provided the units are resident of different economies, and are reported in the balance sheet of the second statistical unit. Therefore, debt defeasance sometimes leads to a change in the institutional unit that records those liabilities.

5. Share and debt buybacks

8.32 If a corporation buys its own shares, the transaction is classified as being a reduction in the equity liability, rather than an acquisition of an asset. Because a corporation cannot have a claim on itself, the liability is deemed to be extinguished, even if the shares are not canceled. Similarly, purchase of a debt security by its issuer is treated as redemption of the debt.

6. Bonus shares

8.33 Sometimes corporations restructure their shares and may offer shareholders a number of new shares for each share previously held. This can be called stock splits or the issue of bonus shares. In contrast to when new shares are issued in return for additional funds, in these cases, no new resources are provided and no transaction is recorded.

D. Financial Derivatives (Other Than Reserves) and Employee Stock Options

1. Financial derivatives

8.34 Financial derivatives (other than reserves) and ESOs are defined in paragraphs [6.58–6.60]. Transactions involving financial derivatives may arise at inception, on secondary markets, with ongoing servicing (such as for margin payments), and at settlement. Financial account entries for derivatives preferably should be shown separately for each of assets and liabilities, but recording of transactions on a net basis is acceptable where separate data on transactions in assets and liabilities are not available (see also paragraph [A7.25]). Any explicit or implicit service charges should be deducted from the value of the financial derivative. However, distinguishing implicit service charges is not usually possible, in which

case, the entire value of the financial derivative is classified as being for the financial asset. Annex 7 describes financial derivatives in further detail.

8.35 At inception:

- (a) The creation of a forward-type contract does not generally require the recording of a transaction in a financial derivative because risk exposures of equal value are usually being exchanged. That is, there is usually zero exposure and zero value for both sides. In some cases, however, there may be a nonzero transaction value at issue. (In addition, there may be a service charge for the issue, as mentioned in paragraph [10.121].)
- (b) The purchaser of an option pays a premium to the seller, which is the acquisition price of the instrument. Sometimes a premium is paid after the inception of the contract. In that case, the value of the premium is recorded at the inception of the contract in the same manner as if it had been paid then, but is shown as being financed by accounts receivable/payable between the seller and the purchaser.

8.36 Subsequent changes in the prices of derivatives are recorded as holding gains or losses, not as transactions (included as revaluations, see paragraphs [9.30–9.31]).

8.37 Sales of options in **secondary markets**—whether exchanges or over the counter—are valued at market prices and recorded in the financial account as transactions in financial derivatives.

8.38 When a contract requires **ongoing servicing** (such as an interest rate swap, where each party meets the servicing obligations that were originally held by the other) and a cash payment is received, there is a decrease (increase) in a financial derivative asset (liability) if, at the time of the payment, the contract is in an asset (liability) position. If compilers are unable to implement this approach because of market practice, all cash receipts

should be recorded as reductions in financial assets, and all cash payments should be recorded as decreases in liabilities.

8.39 Margins are payments of cash or deposits of collateral that cover actual or potential obligations incurred through financial derivatives—especially futures or exchange traded options. (As discussed in paragraph [5.94], margin payments in cash are classified as deposits (if the debtor’s liabilities are included in broad money), loans, or other accounts receivable/payable.)

8.40 At settlement, either a cash payment is made or an underlying item is delivered.

- (a) When a financial derivative is settled in cash, a transaction equal to the cash value of the settlement is recorded for the derivative. In most instances, when a cash settlement payment is received, a reduction in a financial derivative asset is recorded. When a cash settlement payment is made, a reduction of a financial derivative liability is recorded.
- (b) When an underlying item is delivered, two transactions are recorded:
- The transaction involving the underlying item is valued at the market price at the time. The entry for the underlying item is recorded under the relevant heading (goods, financial instrument, etc.).
 - The transaction involving the derivative is valued as the difference, multiplied by the quantity, between the market price for the underlying item and the strike price specified in the derivative contract.
- (c) When more than one contract is settled—in cash, at the same time, and with the same counterparty—some of the contracts being settled are in asset positions and some are in liability positions. In this situation, transactions involving assets should be

recorded separately from those involving liabilities, wherever possible, but net settlements are acceptable when gross reporting is impractical.

2. Employee stock options

8.41 An ESO is created on a given date (the “grant” date), providing that an employee may purchase a given number of shares of the employer’s stock at a stated price (the “strike” price) either at a stated time (the “vesting” date) or within a period of time (the “exercise” period) immediately following the vesting date. Transactions in ESOs are recorded in the financial account as the corresponding entry to the remuneration of employees (as discussed in paragraph [11.20]) or direct investment (paragraph 11.21). When the option is exercised, the transaction in the ESO is recorded in the financial account at a value that reflects the difference between the market price of the equity and the price paid by the buyer for the equity (see also paragraph [8.40(a) and (b)]). Cancellation of ESOs is discussed in paragraph [9.12], while revaluations are discussed in paragraph [9.30]. ESOs do not generally raise separate issues to those for financial derivatives, but one special case occurs when an employee of a subsidiary is issued options for stock in the parent company. Because the parent is not the employer, the subsidiary is shown as acquiring the option from the parent. (If the subsidiary pays nothing or an unrealistic value to the parent, a value may be imputed, possibly direct investment, as discussed in paragraph [11.101] on transfer pricing.)

E. Other Investment

1. One-off guarantees and other debt assumption

8.42 *Debt assumption is trilateral agreement between a creditor, a former debtor, and a new debtor, under which the new debtor assumes the former debtor’s outstanding*

liability to the creditor, and is liable for repayment of debt. Debt may be assumed under a preexisting guarantee, or without a guarantee, such as when a government wants to assist a project or a direct investor assumes the liabilities of its direct investment enterprises for reputational reasons. One-off guarantees are defined in paragraph [5.68]. One-off guarantees are recognized only as financial assets and liabilities from the time they are activated.

8.43 The assumption of the debt may not require repayment at once. According to the accrual principle for time of recording, the assumption of the debt should be recorded at the time the guarantee is activated, rather than when actual payments are made by the new debtor. Repayments by the new debtor and interest accrued on the assumed debt should be recorded as these flows occur.

8.44 The recording in the external accounts of debt assumption through the activation of a one-off guarantee or for other reasons varies depending on the circumstances, as discussed in paragraph [8.45].

8.45 In all cases, the debt-assuming party records the creation of a new liability to the creditor (financial account entry). In addition:

- (a) If the debt-assuming party does not acquire a claim on the (original) debtor because the original debtor no longer exists (e.g., the original debtor has been liquidated), a capital transfer from the debt-assuming party to the creditor is recorded as the corresponding entry to the creation of the liability. The original debt of the debtor to the creditor is written off in the accounts of both the original debtor and the creditor (other changes in financial assets and liabilities account).
- (b) If the debt-assuming party does not acquire a claim on the (original) debtor because the debt assumer seeks to give a benefit to the debtor (as is sometimes the case when governments assume debts), then unless the guarantor is in a direct investment relationship with the original debtor (see (c)), a capital transfer from the debt-assuming party to the original

debtor is recorded. The claim on the original debtor by the creditor is extinguished (financial account entries).

(c) In other cases, the debt-assuming party acquires a claim on the original debtor as a result of the assumption of the debt (financial account entry). Such a claim may be on the original debtor as a debt² or as an increase in the guarantor's equity in the original debtor (e.g., assumption of debt owed by a subsidiary will improve the balance sheet of the subsidiary and, hence, the direct investor's equity in the subsidiary). In this case, the claim on the original debtor by the creditor is extinguished (financial account entry).

(The entries are shown in Box 8.1.)

2. Insurance technical reserves, pension fund entitlements, and provisions for calls under standardized guarantees

8.46 Insurance, pension fund, and standardized guarantee transactions need to be broken down into their service, income, transfer, and financial account elements. An overview of the statistical treatment of insurance and pension schemes is given in Annex 8. Insurance technical reserves sometimes may be classified as direct investment, as discussed in paragraph [6.27]. The following paragraphs show the composition of the financial account entries.

8.47 For nonlife insurance, insurance technical reserves consist of prepayments of insurance premiums and outstanding claims. Prepayments of premiums result from the fact that, in general, insurance premiums are paid in advance. Technical reserves against

²If the value of the debt claim received by the debt assumer is less than the value of the debt liability assumed, as in (b) a capital transfer for the difference is recorded, unless the parties are in a direct investment relationship (see also paragraph [A2.52]).

outstanding claims are reserves that insurance enterprises hold to cover the amounts they expect to pay out for claims that have been reported and are not yet resolved and to cover estimates of claims incurred but not yet reported—including equalization reserves that relate to events that have occurred. When nonlife insurance policies are surrendered by mutual agreement between policyholders and nonlife insurers, the insurance technical reserve liabilities of the nonlife insurers will be reduced by the amount of the unearned premiums that is returned to the policyholders and recorded as a transaction. Correspondingly, the insurance technical reserve assets of the policyholders will be reduced by the same amount and recorded as a transaction.

8.48 Similarly, for life insurance, pension schemes, annuity funds, and standardized guarantee schemes, the changes in technical reserves due to transactions are recorded in the financial account and consist of the amounts of the estimated obligations to beneficiaries and holders that accrued during the period. Pension entitlements generally include those under both funded and unfunded schemes, but do not include potential benefits under social security schemes (see paragraph [5.67]). The increase in pension entitlements shown in the financial account matches the entry in the use of income accounts for the adjustment for change in pension entitlements plus any change in pension entitlements due to capital transfers.

8.49 Totals for insurance technical reserves, pension fund entitlements, and provisions for calls under standardized guarantees and related investment income usually can be identified only in the accounts of insurers, funds, and guarantee providers, rather than in the accounts of their customers. For liabilities, these totals relate to resident providers and need to be allocated among resident and nonresident policyholders. In the absence of specific data on the allocation of these values to policyholders, an indicator such as premiums payable may be used. For assets, the reserves, entitlements, and provisions are liabilities of nonresidents and are not observable by residents, so counterpart data or indicators such as ratios of premiums to

technical reserves may be necessary. Changes in technical reserves resulting from holding gains or losses are not transactions and therefore are recorded in the revaluation account and not in the financial account.

Box 8.1. Entries Associated with Different Types of Debt Assumption

(Showing different situations, recording party, entry, and counterparty)

If debt-assuming party does not acquire a claim on the (original) debtor because the original debtor no longer exists (paragraph [8.45(a)]):

| | |
|------------------|---|
| Original debtor: | other change in volume of debt liability to creditor |
| Assumer: | increase in debt instrument liability (credit) to creditor capital transfer (debit) to creditor |
| Creditor: | capital transfer (credit) from assumer increase in debt instrument claim (debit) on assumer other change in volume of debt claim on original debtor |

If debt-assuming party does not acquire a claim on the (original) debtor because the debt assumer seeks to give a benefit to the debtor (paragraph [8.45(b)]):

| | |
|------------------|--|
| Original debtor: | capital transfer (credit) from assumer reduction in debt instrument liability (debit) to creditor |
| Assumer: | increase in debt instrument liability (credit) to creditor capital transfer (debit) to original debtor |
| Creditor: | reduction in debt instrument claim (credit) on original debtor increase in debt instrument claim (debit) on assumer |

If debt-assuming party acquires a claim on the original debtor (paragraph [8.45(c)]):

| | |
|------------------|---|
| Original debtor: | increase in equity or debt liability (credit) from assumer reduction in debt instrument liability (debit) to creditor |
| Assumer: | increase in debt instrument liability (credit) to creditor increase in equity or debt claim (debit) on original debtor |
| Creditor: | reduction in debt instrument claim (credit) to original debtor increase in debt instrument claim (debit) on assumer |

In cases in paragraphs [8.45(b) and (c)], three parties are involved in the transaction, so the treatment differs from the standard double-entry system.

3. Special drawing rights

8.50 The allocation of SDRs to IMF members is shown as the incurrence of a liability of the recipient under SDRs in other investment, with a corresponding entry under SDRs in reserve assets.

8.51 Other acquisitions and sales of SDRs are shown as transactions in reserve assets.

4. Securities repurchase agreements and other reverse transactions

8.52 These arrangements are defined in paragraphs [7.58–7.61] and described in further detail in Annex 7. Because the risks and rewards of security ownership stay largely with the original owner, no transaction in the security is recorded. If one party provides cash that is repayable when the security is returned, however, the provision of cash is classified as a loan (except when it is a liability of a deposit-taking corporation and part of broad money, in which case it is classified as other deposits).

5. Currency

8.53 Transactions in issued banknotes and coins are recorded under currency and deposits. Transactions by residents with nonresidents using domestically issued banknotes and coins are recorded as transactions in liabilities, and transactions by residents with nonresidents using foreign-issued banknotes and coins are transactions in assets. As noted in paragraphs [3.7–3.8], transactions in domestically issued liabilities between nonresidents are not recorded in the financial account of the balance of payments, and transactions in foreign-issued assets between residents are also not recorded in the financial account but in the other changes in financial assets and liabilities account as reclassifications between different

domestic institutional sectors in cases where the transactions are made between different domestic institutional sectors.

6. Change of contractual terms

8.54 If the original terms of a debt (typically a loan or debt security, but also other debt items) are changed by renegotiation by the parties, then the treatment is that the original liability is repaid and a new liability is created. In contrast, if the original terms of the contract provide that the maturity or interest rate terms or both change as a result of an event such as a default or decline in credit rating, then this involves a reclassification. (This distinction has an effect on net values in practice in cases in which the original and new terms have a different principal, different instrument classification, or different maturity classification; otherwise, the entries cancel out.)

F. Reserve Assets

8.55 Transactions involving monetary gold are recorded in the financial account only if they occur between two monetary authorities for reserve purposes or between a monetary authority and an international financial organization. (Monetary gold is discussed in paragraphs [5.74–5.78]; and gold in the context of reserve assets is discussed in paragraphs [6.78–6.83].)

8.56 All transactions in gold bullion other than those included in monetary gold are recorded as nonmonetary gold in the goods account (discussed in paragraphs [10.50–10.54]). When a monetary authority acquires gold bullion from, or sells gold bullion to, an institutional unit other than a monetary authority or international financial organization, the gold is monetized or demonetized, as discussed in paragraphs [9.18–9.20].

8.56a Similarly, transactions involving unallocated gold accounts are recorded in the financial account under reserve assets only if they occur between two monetary authorities for reserve purposes or between a monetary authority and an international financial organization. Otherwise, they are classified as currency and deposits.

8.57 Financial account transactions with the IMF involve reserve assets, reserve-related liabilities, other investment, and off-balance-sheet liabilities. They are dealt with in detail in Annex 9.

G. Arrears



8.58 The accumulation of arrears related to exceptional financing (when it occurs) needs to be included as a memorandum item to the financial account. Exceptional financing is defined and discussed in Annex 1. Incurring arrears does not involve a transaction, because it is a unilateral act of one party. Therefore, it is not shown as giving rise to entries in the standard presentation of the financial account. However, if the debt is renegotiated, then the original instrument is extinguished and a new instrument is created, which should be recorded as transactions in the financial account.

8.59 In addition to arrears related to exceptional financing, other arrears indicate potential, or actual, problems servicing debt, and so may be shown as supplementary items.

Chapter 9. Other Changes in Financial Assets and Liabilities Account

Chapter 9 Other Changes in Financial Assets and Liabilities Account

A. Concepts and Coverage

Reference:

2025 SNA, Chapter 13, Other Changes in Assets and Liabilities Accounts.

9.1 *In the external accounts, the other changes in financial assets and liabilities account shows changes in financial positions that are not transactions. These changes are also called “other flows” and consist of revaluations and other changes in the volume of financial assets and liabilities. Revaluations comprise holding gains and losses while examples of other changes in volume include the unilateral cancellation of debt by the creditor and reclassifications (including arising from resident-to-resident transactions in financial assets issued by nonresidents). In the external accounts, other changes are recorded only for financial assets and liabilities because the international investment position relates only to external financial assets and liabilities.*

9.2 While sometimes derived as residual items, other changes are economic events that are important in their own right and should be shown separately from transactions. They serve to demonstrate significant changes to the value and composition of items in the balance sheet due to events that have important economic consequences.

9.3 Other changes differ from transactions in terms of their economic nature and accounting entries. A transaction is an interaction between two institutional units by mutual agreement or operation of the law, whereas other changes are changes in the value or volume of assets and liabilities that arise from other economic events. For additional aspects of accounting for other changes, see also paragraphs [3.19–3.21] (types of other flows), [3.60] (timing), and [3.81–3.83] (valuation).

9.4 Table 9.1 shows an overview of the other changes in financial assets and liabilities account. The balancing item for the account is net changes in net IIP arising from other changes.

9.5 Together with the transactions recorded in the financial account, the other changes in financial assets and liabilities explain changes in the IIP. In other words, financial assets and liabilities gain or lose value and appear or disappear as a result of transactions, revaluations, or other volume changes. This relationship can be expressed as the following identity, which is an integral part of the standard presentation of the external accounts:

$$\begin{array}{l}
 \text{Beginning of period position} \\
 + \quad \text{Transactions during the period} \\
 + \quad \text{Revaluations during the period:} \\
 \quad \text{Due to:} \\
 \quad \bullet \quad \text{exchange rate changes and} \\
 \quad \bullet \quad \text{other price changes} \\
 + \quad \text{Other changes in volume during the period} \\
 = \quad \text{End of period position.}
 \end{array}$$

(Table [7.1] also shows this relationship.)

9.6 The other changes in financial assets and liabilities account can be presented by the type of asset or liability as well as by the type of other flow. The classification by type of asset or liability should be consistent with that used in the IIP and financial account to facilitate analysis of particular assets and a comprehensive view of asset and liability positions. The other changes in assets and liabilities account can also be considered in conjunction with investment income from the income account, to obtain another view of the return on financial assets and liabilities (see paragraphs [19.X-19.Y]). As noted in paragraph [9.32], some retained earnings affect the owners' equity through the other changes account, whereas others affect equity through an imputed transaction.

Table 9.1. Overview of the Other Changes in Financial Assets and Liabilities Account

| | Revaluations | | | Other changes in volume | | |
|--|--------------|------------------------------|----------------------------|-------------------------|--|-----------------------------|
| | Total | Due to exchange rate changes | Due to other price changes | Total | Of which: Cancellations and write-offs of debt | Of which: Reclassifications |
| Net changes in financial assets due to other changes | | | | | | |
| Direct investment | | | | | | |
| Portfolio investment | | | | | | |
| Financial derivatives (other than reserves) and employee stock options | | | | | n.a. | |
| Other investment | | | | | | |
| Reserve assets | | | | | | |
| Total | | | | | | |
| Of which: | | | | | | |
| Equity and investment fund shares | | | | | n.a. | |
| Debt instruments | | | | | | |
| Other financial assets and liabilities | | | | | | |
| Net changes in liabilities due to other changes | | | | | | |
| Direct investment | | | | | | |
| Portfolio investment | | | | | | |
| Financial derivatives (other than reserves) and employee stock options | | | | | n.a. | |
| Other investment | | | | | | |
| Total | | | | | | |
| Of which: | | | | | | |
| Equity and investment fund shares | | | | | n.a. | |
| Debt instruments | | | | | | |
| Other financial assets and liabilities | | | | | | |
| <i>Changes in net IIP arising from other changes</i> | | | | | | |
| Note: This table is expository; for Standard Components, see Annex 14. The “of which” items for cancellations and write-offs of debt and reclassifications are supplementary items and do not necessarily sum up to total other changes in volume. | | | | | | |

B. Revaluations

9.25 *Revaluations occur because of changes in the monetary value of a financial asset or liability due to changes in the level of prices.* Revaluations may also be called holding gains or losses. As the term suggests, holding gains or losses are changes in the value of an asset that accrue purely as a result of holding assets over time without transforming them in any way. A holding gain occurs when an asset increases in value or a liability decreases in value; a holding loss occurs when an asset decreases in value or a liability increases in value. Common causes of revaluation are, for equity, changes in expectations of future incomes and, for debt securities, changes in market yields and the creditworthiness of the debtor.

9.26 Because of the importance of instruments denominated in foreign currencies in the IIP and their different behavior, the values of revaluation are separated into those due to two factors:

- (a) exchange rate changes and
- (b) other price changes.

9.27 Exchange rate changes show all the changes that result from exposure to the effect of exchange rates, whereas the other price changes show other causes such as asset price volatility. Revaluation takes into account all price changes during the period, whether realized or not. Holding gains and losses are realized when the asset is sold or liability extinguished. Holding gains and losses on unsold assets and unpaid liabilities are unrealized, but are recorded as revaluation in the other changes in financial assets and liabilities account.

9.28 An exact measure of the factors contributing to revaluations could be made by tracking each instrument held, bought, or sold during the period. In practice, an

approximation can be derived from balance sheet aggregates for each currency of denomination, to separate revaluations into exchange rate changes and other price changes, according to the following steps:

- Step 1: The effect of revaluation due to other price changes is derived for each class of instrument and currency of denomination by subtracting changes due to transactions and other changes in volume from the total change in positions. Because exchange rate changes are always zero in the currency of denomination, all revaluation when expressed in the currency of denomination is due to other price changes. (The currency of denomination is discussed in paragraphs [3.95–3.107].)
- Step 2: The beginning and end of period positions, and changes due to transactions, other volume changes, and revaluation due to other price changes (as derived in Step 1) are converted to the currency of external accounts compilation using the appropriate exchange rates. Positions are converted by the exchange rate at the relevant date. Ideally, transactions and other flows would be converted at the exchange rate at the time of each event or flow. In the example in Box 9.1, flows are converted at the average exchange rate, which is an approximation that assumes that flows, price changes, and exchange rate movements occurred evenly through the period. If an average exchange rate is used, an average of daily exchange rates is preferable as an approximation. (An average of beginning and end of period rates could be misleading when rates did not move evenly through the period.) Currency conversion is discussed in paragraphs [3.104–3.108].
- Step 3: The effect of revaluation due to exchange rate changes is derived for each class of instrument and currency of denomination by subtracting changes due to transactions, other changes in volume, and revaluation due to other price changes from the total change in positions. The exchange rate effects are always zero on instruments

denominated in the currency of external accounts compilation (with the exception set out in paragraph [9.31]).

Step 1 needs to be calculated for each currency of denomination by type of instrument, although in practice currencies that represent a small proportion of the total may be combined. For instruments that are valued at nominal prices, there can be exchange rate effects, but no other price changes. A numerical example is given in Box 9.1.

1. Debt reorganization

9.29 A debtor and creditor may change the terms of a debt agreement. The terms may be changed such that the value of the new claim differs from the value of the old claim. In commercial situations, differences in values between old and new claims are generally treated as a valuation change. Debt cancellations and write-offs are other volume changes and are discussed in paragraphs [9.8–9.11]. However, as noted in paragraph [14.23], if there is an intention to convey a benefit, the change may be treated as a capital transfer. Debt reorganization is discussed in further detail in Annex 2.

2. Financial derivatives and employee stock options

9.30 The exchanges of claims and obligations at the inception of a derivative contract are financial transactions creating asset and liability positions that normally have, at inception, zero value if the instrument is a forward-type contract and value equal to the ex-ante premium payable if the instrument is an option. Changes in the value of derivatives due to change in the underlying item are recorded as revaluations. (Changes in the value of derivatives to or from zero are also classified as revaluations, not economic appearance or disappearance of assets.) The settlement of a financial derivative position is a transaction, recorded in the financial account. Changes in the values of employee stock options at or after

the vesting date are revaluations (see paragraphs [3.59], [7.39], and [11.20]). (In practice, it may be feasible to recognize the revaluation only at exercise date.)

9.31 Financial derivatives that include a foreign exchange risk are a case where the steps for separating exchange rate and other revaluation, as stated in paragraph [9.28], are not applicable. In those cases, a valuation change due to exchange rate changes can arise even in the currency of denomination of the instrument. In some cases, such as cross-currency swaps that are also interest rate swaps, it may not be practical to separate exchange rate changes from other price changes, so a convention that all revaluation effects are due to other price changes may be adopted (see also paragraph [A7.44]).

2a. Implications of other flows along ownership chains

9.31a Other flows will sometimes impact the value of an entity. For instance, the value of a direct investment enterprise may change due to exchange rate movements if it has external assets and liabilities denominated in foreign currencies. These changes should be recorded as exchange rate changes by the economy of the direct investment enterprise. The value of a direct investment enterprise is also likely to change if its financial assets in a specific economy are seized with no compensation or its foreign real estate is destroyed in an earthquake. These changes should be recorded as other changes in volume by the economy of the direct investment enterprise. Conversely, the economy of the direct investor should record such changes in the value of (directly or indirectly owned) direct investment enterprises as other price changes. The economy of an investor should only record exchange rate changes if there is a change in the equity value resulting directly from the currency denomination of the direct investment enterprise's equity. Similarly, it should only record other volume changes when there is a change in the value of its equity holdings that is neither

due to transactions nor due to revaluations, e.g., if the shares it holds in the direct investment enterprise have been seized.

3. Implications of different treatments of retained earnings

9.32 In cases where retained earnings are not imputed as being payable to the owners, these earnings contribute to revaluations. The *SNA* and external accounts have two treatments for retained earnings:

- For direct investors' equity in their direct investment enterprises and for investment fund shares, retained earnings are imputed as being payable to the owners and reinvested as an increase in their equity. (The earned income account entries are discussed in paragraphs [11.33–11.47]; the corresponding financial account entries in paragraphs [8.15–8.16] and [8.28].) Similarly, insurance and pension fund reserves and provisions for calls under standardized guarantees include property income attributed to policyholders. (The earned income account entries are discussed in paragraphs [11.77–11.84].)
- In other cases of equity, there is no imputation of income or financial account transactions to the owners on account of retained earnings. The result is that the increase in the value of the equity caused by the accumulation of retained earnings is reflected in increased value in the IIP without a transaction and is, therefore, shown as a result of revaluation.

Box 9.1. Example of Calculation of Revaluation Due to Exchange Rate Changes

The steps are described in paragraph [9.28]. The data in normal text are given; the data in bold are derived.

Step 1. Derivation of other revaluation in terms of the currency of denomination of the instrument (in this case, €):

Other revaluation can be derived as 8, i.e., 50 (end of period position) – 30 (beginning of period position) – 12 (net transactions) – 0 (other volume changes) = 8.

Step 2. Conversion of currency of denomination to the currency used for compilation of external accounts statistics (in this case from € to domestic currency):

Beginning of period positions are multiplied by 2; flows by 2.5 (rate derived as the average rate on the period); and end of period positions by 3.

Step 3. Derivation of exchange rate changes in the currency used for compilation of external accounts statistics: For the bonds denominated in €, revaluation due to exchange rate changes can be derived as 150 (end of period position) – 60 (beginning of period position) – 30 (net change due to transactions) – 20 (net change due to other revaluation) = 40.

| | Beginning of period position | Net transactions during period | Other volume changes | Step 1 Other revaluations | Revaluation due to exchange rate changes | End of period position |
|--|------------------------------|--------------------------------|----------------------|---------------------------|--|------------------------|
| Values in currency of denomination: | | | | | | |
| Bonds denominated in € (in €) | 30 | 12 | 0 | 8 | 0 | 50 |
| Exchange rate (domestic currency per €) | 2 | 2.5 | | 2.5 | | 3 |
| Values in currency of compilation: | | | | | | |
| Bonds denominated in € (in dom. curr.) | 60 | 30 | 0 | 20 | 40 | 150 |

(Use of average exchange rates in step 2 is an approximation, as discussed in step 2 of paragraph [9.28]. Preferably, exchange rates at the time of the event would be used.)

4. Implications of differences between transaction prices and values recorded in positions

9.33 Nominal valuation is used for positions in nonnegotiable instruments, namely loans, deposits, and other accounts receivable/payable (see paragraphs [7.40–7.44]). However, when transactions in these instruments do occur, they are valued at market prices (see paragraph [8.12]), with transaction prices often being less than the nominal values, because the market price takes account of the possibility of default. To account for the inconsistency between the market valuation of transactions and nominal valuation of positions, the seller records other price changes during the period in which the sale occurs, equal to the difference between the nominal and the transaction value and the buyer records an opposite amount as other price changes.

9.33a There can also be differences between transaction prices and the values recorded in the IIP for other types of instruments. For instance, unlisted equity is sometimes traded at values that deviate significantly from the IIP values. In such cases, compilers should use all the information available to improve the quality of the estimated positions when they become aware that they are under or over-estimated (e.g., by implementing backward revisions according to their national revision policy).

5. Implications of treatment of interest

9.34 Any indexation amounts not included in interest are classified as revaluation. The treatment of interest on index-linked instruments is discussed in more detail in paragraphs [11.59–11.65].

9.35 Revaluations also arise from changes in market yields on fixed-interest debt securities. The value of interest is determined by the yield to maturity at inception (see

paragraphs [11.52–11.53]), so the effect of any subsequent change in the value of the security due to changes in market interest rates is classified as being due to revaluation.

C. Other Changes in the Volume of Financial Assets and Liabilities

9.7 Other changes in the volume of financial assets and liabilities are changes in the value of these assets or liabilities that are neither transactions nor revaluations. They include, amongst others, economic appearance and disappearance of financial assets and liabilities, catastrophic losses, cancellations and write-offs of debt, uncompensated seizures, reclassifications, and the changes in financial assets arising from entities changing their economy of residence. Because of the heterogeneous nature of other changes in volume, analysts may sometimes wish to identify the major components. While other changes in volume are part of the standard presentation, “of which” items for cancellations and write-offs of debt and reclassifications are included in the external accounts as supplementary items.

1. Cancellations and write-offs of debt

9.8 A number of circumstances may lead to reduction or cancellation, by other than normal repayment, of liabilities. Debt assumption and debt forgiveness involve transactions and are discussed in paragraphs [8.42–8.45] and [13.22–13.23], respectively. Valuation changes associated with debt reorganization are dealt with in paragraph [9.29]. Debt reorganization and related issues are discussed in more detail in Annex 2.

9.9 Changes in claims resulting from write-offs are excluded from the financial account. Specifically, a creditor may recognize that a financial claim can no longer be collected because of bankruptcy or other factors and it may remove the claim from its

balance sheet.¹ This recognition (by the creditor) should be accounted for as other changes in volume of assets. (The corresponding liability should also be removed from the balance sheet of the debtor.) If there is collateral, only the part of the claim that is not covered by the collateral should be recorded as other changes in volume. The remaining part should be treated as a repayment of the original instrument with a corresponding transaction that would account for the creditor taking economic ownership of the collateral (see also paragraph [9.13]).

9.10 Unilateral cancellation of a financial claim by a debtor (debt repudiation) is not recognized. Debt forgiveness, which is a capital transfer, usually concerns government debt; most commercial situations where the impossibility of debt collection is recognized by the creditor are treated as write-offs.

9.12 If an employee stock option is extinguished between the grant and vesting dates (e.g., if the employee departs) without an agreed settlement between the parties, an other change in volume is recorded (namely, a loss of an asset by the employee and a reduction of liabilities by the employer).


¹Usually, debt is written off as uncollectible because of the bankruptcy or liquidation of the debtor; however, it may also be written off for other reasons, such as a court order or to account for public announcements where nominal valuation clearly provides unrealistic values for loans. The write-off may be full or partial; partial write-offs may arise, for example, under a court order, or if the liquidation of the debtor's assets will allow some of the debt to be settled. Recognition that the debt is uncollectible should be distinguished from internal accounting provisions of the creditor for the possibility of default (such as adjustments to fair value, nonperforming loans). Although such provisions may be useful for analysis, they do not mean that the debt should no longer be recognized as existing. The treatment of provisions is different in financial accounting and monetary and financial statistics where such provisions are recognized directly on the balance sheet. Therefore, for external sector statistics purposes, compilers need to adjust data in cases where the source is accounting or monetary and financial statistics data.

2. Appearance and disappearance of financial assets and liabilities

Monetization and demonetization of gold bullion

[9.12a] Gold bullion can be a financial asset (monetary gold) or a good (nonmonetary gold), depending on the holder and the motivation for holding. Monetization is the change in the classification of gold bullion from nonmonetary to monetary. Demonetization is change in the classification of gold bullion from monetary to nonmonetary. The treatment of particular transactions is as follows:

- (a) When a monetary authority sells gold bullion that is a reserve asset to a nonresident entity that is not a monetary authority or international financial organization, an entry for nonmonetary gold is recorded in the goods account. Demonetization of the gold bullion occurs immediately before the transaction and is shown in the other changes in assets and liabilities account of the monetary authority.
- (b) When a monetary authority sells gold bullion that is a reserve asset to a resident entity that is not a monetary authority, there is no international transaction. As in case (a) above, demonetization of the gold bullion occurs immediately before the transaction.
- (c) When a monetary authority purchases gold bullion from a nonresident that is not a monetary authority or international financial organization, the transaction is recorded in nonmonetary gold in the goods account. Monetization of the gold bullion occurs immediately after the transaction and is shown in the other changes in assets and liabilities account of the monetary authority.
- (d) When a monetary authority purchases gold bullion from a resident for its reserve assets, there is no international transaction. As in case (c) above, monetization of the gold bullion occurs immediately after the transaction.

- (e) When buyer and seller are monetary authorities of different economies and both hold the gold bullion as part of their reserve assets, there is a transaction in gold bullion (recorded in the financial account; see paragraph [8.55]). The same treatment applies for transactions in gold bullion between a monetary authority and an international financial organization.
- (f) If the monetary authorities deposit gold bullion that they own in an unallocated gold account, the gold bullion is demonetized immediately before the transaction. If the account is with a nonresident, a transaction in nonmonetary gold is recorded in the goods account with a corresponding entry in currency and deposits, and then a  reclassification to monetary gold—unallocated gold accounts—if held as a reserve asset. However, if the deposit is with another monetary authority or an international financial institution, transactions in monetary gold are recorded (see paragraph [6.80]).
- (g) Similarly, if the monetary authorities withdraw gold bullion from an unallocated gold account held as a reserve asset, a reclassification to currency and deposits is recorded before the transaction. As the account is with a nonresident, a transaction in currency and deposits is recorded with a corresponding entry in nonmonetary gold in the goods account. The gold bullion is monetized as monetary gold—gold bullion, if held as a reserve asset. However, if the deposit is with another monetary authority or an international financial institution, transactions in monetary gold are recorded (see paragraph [6.80]).
- (h) If monetary authorities engage in gold swaps, monetary gold provided as collateral that is not readily available for meeting BOP financing needs should be excluded from the cash borrower's reserve assets and either be demonetized and classified as nonmonetary gold (gold bullion) or reclassified to other investment (unallocated gold accounts) through other changes in volume. Once the gold swap has been settled and

the gold is again available for meeting BOP financing needs, it should be reclassified to monetary gold.

- (i) In other cases, gold bullion is nonmonetary at all times and any international transactions are recorded in nonmonetary gold under goods (as discussed in paragraphs [10.50–10.54]).

(The above cases relating to a monetary authority also apply to an international financial organization.)

Treatment of assets declared under tax amnesty

[9.12b] A tax amnesty is a limited-time opportunity for a specified group of taxpayers to report undeclared income and assets relating to an earlier tax period and pay an amount in exchange for forgiveness of the tax liability, without fear of criminal prosecution. If the declared income and assets were not estimated and considered significant for the economy, or significantly differ from the current estimates, adjustments should be undertaken to record the data on the corresponding instruments. Such adjustments should ideally be implemented as transactions in the relevant periods, ensuring that adjustments for both income and assets are consistent. However, if it is not possible to adjust historical series on assets declared under tax amnesties, as a second best these assets could be recorded in the international investment position in the current period through other changes in volume.

3. External events

Catastrophic losses

[9.12c] Catastrophic losses are the result of large scale, discrete, and recognizable events that may destroy a significantly large number of assets within any of the asset

categories. Such events will generally be easy to identify. They include major earthquakes, volcanic eruptions, tidal waves, exceptionally severe hurricanes, drought, and other natural disasters; acts of war, riots, and other political events; and technological accidents such as major toxic spills or release of radioactive particles into the air. Catastrophic losses mostly occur for nonfinancial assets, but they may also arise for financial assets and are recorded as other changes in volume. For instance, major losses as deterioration in the quality of land caused by abnormal flooding or wind damage and destruction of buildings in earthquakes are recorded as other changes in volume for direct investment in case of cross-border ownership since branches or notional units are identified when nonresidents own real estate and other natural resources (see paragraph [6.31]). In addition, where evidence of ownership of financial assets depends on written records and these records are destroyed, it may not be possible to re-establish ownership. Similarly, accidental destruction of currency or bearer securities may result from a natural catastrophe or political events.

Uncompensated seizures

[9.12d] Governments or other institutional units may take possession of the assets of other institutional units, including nonresident units, without full compensation for reasons other than the payment of taxes, fines, or similar levies. If the compensation falls substantially short of the values of the assets as shown in the balance sheet, the difference should be recorded in other changes in volume as an increase in assets for the institutional unit doing the seizing and a decrease in assets for the institutional unit losing the asset. Such actions are called uncompensated seizures of assets. For seizures between residents and nonresidents relating to nonfinancial assets, a supplementary item can be recorded. When entities are only indirectly impacted by uncompensated asset seizures through their ownership of entities that had their assets seized, then the impact should be recorded as other price changes rather than other changes in volume (see also paragraph [9.31a]).

Insurance reserves, pension entitlements, and provisions for standardized guarantee schemes

[9.12e] Changes in model assumptions can give rise to other changes in the volume of insurance reserves, pension entitlements, and provisions for standardized guarantee schemes. For an annuity, the relationship between premiums and benefits is usually determined when the contract is entered into, taking account of mortality data available at that time. Any subsequent changes to mortality data used in the model will affect the liability of the annuity provider towards the beneficiary, with the consequent changes in provisions recorded as other changes in volume. In contrast to changes in model assumptions, changes in pension entitlements negotiated between the parties are transactions, so would be classified as financial transactions, with a concomitant current or capital transfer.

4. Reclassifications

9.13 A reclassification entry is necessary when a financial asset or liability or an institutional unit changes its characteristics or status without there having been a cross-border transaction. In contrast to reclassifications, other cases—such as the conversion of a convertible bond (see paragraph [8.29]) and the exercise of a warrant (see paragraph [5.87])—are shown as transactions involving repayment of the original instrument and creation of a new one because they arise from bilateral agreements.

Tradable loans

9.14 A loan may become a security in the circumstances discussed in paragraph [5.45]. In that case, the deduction of nominal value of the old loan is a reclassification, as is the appearance of the new security at market prices. Any difference between the two values at the time of conversion should be recorded as a revaluation of the loan (see also paragraph [9.33]).

Change in contractual terms

9.15 The original terms of a contract may provide that the maturity and interest rate terms change as a result of an event such as a default or decline in credit rating; then this involves a reclassification. In contrast, a change in the terms as a result of renegotiation by the parties is a transaction, and thus is shown as a repayment of the old instrument and issue of a new one in the financial account.

Transactions in existing assets

9.16 Transactions in existing assets can result in changes in the composition of assets and liabilities in the IIP. As noted in paragraph [3.7], when a financial instrument issued by a nonresident is sold by a resident in one institutional sector to a resident in another sector, the composition of assets in the IIP is changed by a reclassification entry and not by imputing transactions in the financial account.

Changes in functional category

9.17 As a result of a change in the relationship between the parties or change in the liquidity of assets, the functional category may be changed. For example, if the relationship between the parties changes to direct investment because an investor adds to its holdings and so qualifies as a direct investor, the previous holdings would be reclassified to direct investment. (See also paragraph [6.36].) Another example is a loan that is reclassified as securities (see paragraphs [5.45] and [9.14]) and so from other investment to portfolio investment.

Reclassification of unallocated gold accounts

9.19 Unallocated gold accounts are classified as currency and deposits unless they are held by the monetary authorities as part of reserve assets. Unlike gold bullion,

unallocated gold accounts have counterpart liabilities. To be classified as monetary gold, the unallocated gold accounts must be held as part of reserve assets, and so the counterpart liability is necessarily on a nonresident.

9.20 If a monetary authority acquires an unallocated gold account to be classified as reserve assets, it is recorded first as a transaction in currency and deposits and then reclassified to monetary gold (unallocated gold accounts) as a change of classification in the other changes in the volume of assets and liabilities account of the monetary authority. Removing an unallocated gold account from reserve assets is recorded as, first, a change in classification from monetary gold to a currency and deposit in the other changes in the volume account and then a transaction in currency and deposits. However, transactions between monetary authorities and with international financial institutions are recorded as transactions in unallocated gold accounts within monetary gold if the unallocated account is held as a reserve asset.

Financial assets and liabilities of persons and other entities changing residence

9.21 The conditions under which entities can change their economy of residence were discussed in Chapter 4. When persons and other entities change their economy of residence, their existing financial assets and liabilities are added to or removed from the IIP through a reclassification, not by imputing transactions in the BOP. The change in the residence does not involve a transaction between two entities, but a change in the status of a single entity. Because of the treatment of ownership of land and buildings, as well as certain other cases (discussed in paragraphs [4.34–4.40]), notional units may be created or eliminated as a result of the change in residence status of an owner. The treatment of change in residence applies to all the financial assets and liabilities, not just those that are shifted to the new economy of residence.

9.22 In addition to change in the status of existing assets, new financial claims and liabilities may be created by transactions around the time of change of residence. For example, new bank accounts may be created in the new economy of residence. In those cases, the treatment is determined by the residence status of the owner at the time of the transaction. If the relation of the timing of the transaction and the change of residence is unknown or effectively simultaneous, a convention can be adopted, such as that the change of residence occurs first.

9.23 Corporations sometimes change residence. Most cases labeled as corporate migration involve moving assets between entities (see paragraph [8.19] on corporate inversion). However, in the case when corporate change of residence occurs (see paragraph [4.167]), the change in the residence of the owner of financial assets and liabilities is treated as a reclassification, in the same way as a change of residence of individuals.

Change in the sector of an institutional unit

9.24 Corporations may also change sector. For instance, other financial corporations may become deposit-taking corporations, or vice versa. In such cases, the change in the sector classification of the owner of financial assets and liabilities is also treated as a reclassification.



Chapter 10. Goods Account[¶]

(New BPM chapter, split from existing Chapter 10: Goods and Services Account)

Chapter 10 Goods Account

A. Overview of the Goods Account

References:

[2025 *SNA*, Chapter 7], Production Account.

United Nations, *International Merchandise Trade Statistics: Concepts and Definitions*

United Nations, *International Merchandise Trade Statistics: Compilers Manual, Revision 1*

10.1 The goods account shows international transactions in goods. *Goods are physical, produced objects, over which ownership rights can be established and whose ownership can be transferred from one institutional unit to another by engaging in transactions on markets.* In addition, electricity which is not a physical object is shown in the goods account. Goods may be used to satisfy the needs or wants of households or the community or used to produce other goods or services. The production of a good can be separated from its subsequent sale or resale. Goods are shown separately from services. Services are defined in paragraph [11.x].

10.2 Table 10.1 shows the broad structure of the goods account. The italics show supplementary items that relate to distribution (merchanting and re-exports) and global manufacturing (processing and factoryless goods production) arrangements.

[¶] **Note:** This Chapter is concurrently undergoing [Global Consultation](#).

| Table 10.1. Overview of the Goods Account | | |
|--|-------------------------------|----------------------------------|
| | Exports (Credits/Revenues) | Imports (Debits/Expenditures) |
| General merchandise on a balance of payments basis | | |
| <i>Of which: Re-exports</i> | | <i>n.a.</i> |
| <i>Of which: Goods traded within a global manufacturing arrangement</i> | | |
| Net exports of goods under merchanting | | <i>n.a.</i> |
| <i>Goods acquired under merchanting (negative exports)</i> | | <i>n.a.</i> |
| <i>Of which: Material Inputs acquired abroad from third parties by the principal within a global manufacturing arrangement</i> | | <i>n.a.</i> |
| <i>Goods sold under merchanting (exports)</i> | | <i>n.a.</i> |
| <i>Of which: Material Inputs sold by the principal to a contractor abroad within a global manufacturing arrangement</i> | | <i>n.a.</i> |
| Nonmonetary gold | | |
| Total goods | | |
| Balance on international trade in goods | | |
| Note: This Table is expository; for Standard Components, see [Annex 14]. | | |

Goods and services

10.3 The goods account and the services account show transactions in items that are outcomes of production activities. The focus of these accounts is the point at which goods and services are exchanged between a resident and a nonresident. The national accounts also focus on other points, such as their production, consumption, or use in capital formation.

10.4 *Production is an activity carried out under the responsibility, control and management of an institutional unit, that uses inputs of labor, capital and goods and services to produce outputs of goods and services.* The term “product” refers to both goods and services.

10.5 The corresponding entries to goods and services flows may be in the financial, current, or capital accounts. If payment is made at the same time as the provision of the good or service, the corresponding entry is in the financial account, such as in currency and deposits. When payment is not made at the time of change of ownership, trade credit or another form of financial instrument (such as a bill of exchange) is established. If payment is made before change of ownership, there is an advance from the importer to the exporter. In some cases, goods and services are exchanged for something other than financial assets; for example, in the case of barter, there is a corresponding entry in goods or in services or in the capital account.² In the case of aid or gifts, the corresponding entries are under current or capital transfers.

10.6 The distinction between goods and services and other entries is determined by the nature of economic value supplied. Goods and services represent outcomes of the production process. In contrast, when other resources, such as labor, land, or other natural resources, or financial resources, are supplied, they are shown in other accounts. Both the goods account and the services account can include transactions in products that were generated in previous periods (e.g., second-hand goods, goods sold from inventories, and knowledge-capturing products such as software and research embodied in patents) and goods and services that embody a large proportion of output of other economic territories (e.g., re-exports and goods under merchanting).

10.7 In the balance of payments, the valuation of goods usually includes transport within the exporting economy as well as wholesale and retail services indistinguishably in the price of the goods. Furthermore, the value of some service items includes the values of some goods in the cases of travel, construction, and government goods and services n.i.e. Some services,

² For example, a merchandise import that is paid for using crypto assets without a corresponding liability would give rise to a debit/expenditure entry in the goods account and a credit/revenue entry in the capital account.

particularly manufacturing services, repairs, and freight transport, also relate to goods. In practice, the distinction made between goods and services sometimes takes into account other considerations, such as data sources (see, for example, paragraph 10.12(c)).

10.8 International trade in goods and services includes digital trade. Digital trade comprises all international trade that is digitally ordered and/or digitally delivered.³ Digitally ordered trade is aligned with the 2009 OECD definition of e-commerce but focuses only on international transactions in goods and services. Both goods and services can be digitally ordered whereas only services can be digitally delivered. Digital trade is discussed further in Annex 5 and digitalization is discussed in Chapter 16. Shipping charges associated with digital trade are allocated in line with the FOB valuation principle (see paragraph 10.24). Digital trade is often facilitated by digital intermediation platforms (online marketplaces) that charge a fee for the intermediation service (see paragraph [10.158])

B. General Merchandise

a. Introduction

10.9 *General merchandise on a balance of payments basis covers goods whose economic ownership is changed between a resident and a nonresident and that are not included in the following specific categories: goods under merchanting (see paragraphs 10.41–10.51, nonmonetary gold (paragraphs 10.52–10.546), and parts of travel (paragraph [10.94]), construction ([10.101]), and government goods and services n.i.e. (paragraph [10.173]).*

³ See IMF/OECD/UN/WTO, *Handbook on Measuring Digital Trade*, 2nd Edition, 2023

10.10 International merchandise trade statistics (IMTS) are usually the main data source for general merchandise in the goods account. The international standards for merchandise trade data are set out in United Nations *IMTS: Concepts and Definitions*. IMTS cover goods “which add to or subtract from the stock of material resources of a country by entering (imports) or leaving (exports) its economic territory” (United Nations *IMTS: Concepts and Definitions 2010*, paragraph 1.2). This basis differs from the change of ownership between residents and nonresidents required for balance of payments, so adjustments need to be made. In other respects, the IMTS standards are closely linked to those in this *Manual*.

10.11 The data used as sources for general merchandise include customs data, international transactions reporting systems, other administrative data (including value-added tax systems), surveys of traders, and direct reporting by enterprises, or combinations. Adjustments to the IMTS source data may be needed to account for coverage, timing, valuation, and classification that do not meet balance of payments guidelines. It should be noted that United Nations *IMTS: Concepts and Definitions 2010* recommends items for inclusion and for exclusion that are closely aligned with some, but not all, of the items to be included and items to be excluded in general merchandise outlined below (see United Nations *IMTS: Concepts and Definitions 2010*, paragraphs 1.10 to 1.55). Balance of payments compilers are therefore required to be aware of national practices for coverage of IMTS.

b. Items to be included in general merchandise

10.12 Because there is a change of ownership of goods between a resident and a nonresident, the following cases are included in the balance of payments definition of general merchandise:

- (a) Banknotes and coins not in current circulation and unissued securities (see also paragraph [5.37]). They are valued as commodities, rather than at face value. Banknotes and

coins may be not in circulation because they have not yet been issued, or they have been withdrawn from circulation and demonetized. Sales of coins to or between collectors at a premium are valued at the transaction price, rather than the face value. (Banknotes and coins in circulation and issued securities are financial instruments and are excluded from goods.);

(b)Electricity, gas, oil, and water. However, charges invoiced separately for the transmission, transport, or distribution of these products are included in services under transport and other business services—see paragraphs [10.74] and [10.159]. Allowing water to flow when that flow is required by international law on river flows is not an international transaction;

(c)Noncustomized packaged software (systems and applications), and video and audio recordings, on physical media, such as disks and other devices, with a license for perpetual use are included in general merchandise. These products are included at their full transaction value (i.e., not at the value of the empty disks or other storage device). Software provided in this manner is included in goods; other software is included in services—see paragraphs [10.143–10.144].⁴ (Noncustomized software is for general use, rather than being made to order. For classification of customized software and other cases, see Table [10.4].);

(d)Goods procured in ports by carriers. Goods such as fuels (bunkering), provisions, stores, ballast, and dunnage procured by nonresident transport operators in ports from resident providers are included in exports of general merchandise. Similarly, goods procured by resident transport operators from nonresident providers are included in imports. Ports are defined widely to include sea and ocean terminals, airports, inland waterways, and providers of goods and services used in a territory by road

⁴To assist in analyzing software as a whole, it may be useful to identify separately software included in goods so as to compare or combine it with software included in services.

- and rail transport service providers that are residents of another economy. Goods procured by ship's crew, drivers, etc. for their own use are included in travel. Fuel costs of small-scale transport operators are goods procured in port by carriers rather than travel (see paragraph [10.81]);
- (e) Goods supplied or acquired by carriers away from the territory of residence of the operator. For example, fish and other marine products caught by ships operated by residents of the compiling economy and sold abroad directly should be included. Similarly, oil and minerals retrieved from the ocean floor by resident operators and sold abroad directly should be included. The goods could be acquired or sold in foreign ports or at sea to foreign vessels;
- (f) Goods acquired by a lessee under a financial lease. Financial leases are defined in paragraph [5.56]. Because the lessee is the economic owner, a change of ownership between the seller of the goods and the lessee is recorded at the start of the lease. The lessor has legal title but does not have economic ownership. In contrast, goods under operating leases do not change ownership to the lessee, and thus are not included in general merchandise when delivered to the lessee. (Operating leases are discussed in paragraphs [10.153–10.156].);
- (g) Goods sent abroad without a change of ownership, but later sold. Goods sent abroad on consignment or for storage, repair, exhibition, processing, and so forth without a change of ownership are not recorded at the time they are sent abroad, but if they are later sold to a resident of an economy different from that of the owner, they should be recorded in general merchandise. (See paragraph 10.23 for further information on goods on consignment.);

- (h) Export sales to merchants and import purchases from merchants (the corresponding entries of the merchant are recorded in goods under merchanting, see paragraph 10.41);
- (i) Goods sold to or purchased from nonresidents without the goods leaving the reporting economy. Examples include export sales to merchants and import purchases from merchants under an inverse merchanting arrangement (see paragraph 10.47); and, within global manufacturing arrangements (from the perspective of the economy where the contractor or processor is resident) purchases and sales of goods, by the principal, from or to, residents of the same economy as the contractor or processor, and where the goods do not leave the reporting economy (see paragraphs 10.62(b), 10.63(b) and 10.69(b)).
- (j) Goods acquired from, or sold to, nonresidents in a global manufacturing arrangement (from the viewpoint of the economy where their principal is resident) without the goods passing through the reporting economy (see paragraphs 10.62(b), 10.63(b) and 10.69(b));
- (k) Equipment that is sold or given away while outside the territory of residence of its original owner. For example, equipment originally taken out of the territory for temporary purposes, such as construction, exhibition, or fishing, may be subsequently sold or given away;
- (l) Illegal goods;
- (m) Smuggled goods that are otherwise legal;
- (n) Gifts in kind;
- (o) Parcel post where there is a change of ownership;

- (p) Goods lost or destroyed after ownership has been acquired by an importer but before the goods have crossed a frontier. (However, goods lost or destroyed before ownership has been acquired by an importer are excluded from merchandise trade);
 - (q) Livestock that changes ownership;
 - (r) Government sales of goods to and purchases of goods from nonresidents. Acquisitions of military equipment from nonresidents should be included in general merchandise. Goods supplied by governments to their own embassies, military bases, and so forth involve resident-to-resident transactions and so are not covered in the external accounts. Expenditure by embassies, military bases, and so forth is included under government goods and services n.i.e. (see paragraph [10.175]);
 - (s) Goods where there is no associated payment, such as those financed by grants or loans;
 - (t) Humanitarian aid in the form of goods;
 - (u) Goods transferred to or from a buffer stock organization;
- and
- (v) Any other goods not identified in the data sources (IMTS) where there is a change of ownership.

10.13 When a customs system is used as a source of data on goods, there is a need to make adjustments to include any goods not recorded in customs data where there is a change of ownership (except for goods that should be included elsewhere, such as in parts of travel, construction, or government goods and services n.i.e.). Cases that sometimes arise include shuttle trade (see paragraph 10.14); acquisition of ships, aircraft, and satellites; trade between customs free zones and other special zones of an economy and residents of other economies, or goods that enter customs warehouses, in economies that use the special trade system (see paragraph [10.25]); and amounts below customs thresholds.

10.14 Goods for resale acquired by travelers while on visits (sometimes called shuttle trade) are included in general merchandise. *Shuttle trade covers transactions involving the purchase of goods in an economy by travelers (nonresidents) who then transport these goods back to their economy of residence where they are to be sold; goods purchased by travelers in their home country for resale abroad; and goods purchased by travelers abroad in one economy and sold abroad in a second economy.* Because the intent is not to acquire goods for personal use—recorded under travel—but to engage in a business and to make a profit, the goods acquired and sold are recorded under general merchandise. (Other expenses incurred by these traders are dealt with in paragraphs [10.17(d), 10.72, and 10.81.]) Shuttle trade, conducted by a person or economic unit not covered by formal arrangements, is usually considered part of the informal economy. This is discussed further in Chapter 18.

10.15 Goods for own use or to give away acquired by travelers in excess of customs thresholds and included in customs statistics are also included in general merchandise. For example, durable goods (such as cars and electrical goods) and valuables (such as jewelry) may be acquired in this way and be brought back to the territory of residence of the owner. This treatment is consistent with international merchandise trade statistics, but care is needed to avoid double counting such goods by including them also under travel. (See paragraphs [10.86–10.90] for goods included in travel.)

10.16 When an international transactions reporting system is used as a source of data on goods, there is a need to make adjustments to include any goods where there is a change of ownership but no associated payment. Examples include humanitarian goods as aid, goods as gifts, goods provided to affiliated enterprises, goods under barter transactions, goods under trade credit, and goods where payment involves residents' bank accounts held in other economies.

c. Items to be excluded from general merchandise because there is no international transaction

10.17 Because there is no change of ownership of goods between a resident and a nonresident, or because the goods have no value, the following cases are excluded from general merchandise:

- (a) Transit trade. These goods are admitted under special customs procedures that allow the goods to pass through the territory. They are excluded from the general merchandise of the territory of transit;
- (b) Migrants' personal effects. The personal property that accompanies people changing residence is not classified as a transaction because there is no change in ownership;
- (c) Goods consigned to embassies, military bases, and so forth from their home authorities and vice versa;
- (d) Goods sent to an enterprise's external operations where those operations are not sufficiently substantial to constitute a branch. A common example is goods sent abroad from the home base for use in a construction project not undertaken by a separate entity; these goods are not included in exports of general merchandise of the territory of the home base;
- (e) Goods temporarily exported or imported without a change of ownership. Examples include goods for repair, as part of an operating lease, and for storage, and animals or artifacts for participation in exhibitions or competitions. (Such movements of goods should be tracked, so as to identify cases where the goods are subsequently sold, rather than returned; see paragraph 10.10.12(g). Identification of these movements may help identify associated items, such as repair, operating leases, storage services, exhibition charges, and competition winnings.);

(f) Inward and outward flows of goods for processing, assembly, labeling or packing by an entity that does not own the goods concerned. (Movements of such goods should be tracked to reconcile IMTS with general merchandise on a balance of payments basis and to assist in identifying associated services charges to be recorded in manufacturing services on physical inputs owned by others, as discussed in paragraphs [10.62–10.71]. These values also help identify cases where the goods are subsequently sold, rather than returned, in which case they are identified as an export from the owner's economy at the time of sale, see paragraph 10.12(g).);

(g) Goods with no positive value (e.g., dangerous goods exported for disposal or storage). These goods are not general merchandise, but could give rise to associated disposal or storage services; see paragraph [10.152]. However, waste and scrap with positive values are included in general merchandise;

(h) Returned goods. In these cases, the goods were not accepted, or a change of ownership occurred but the parties later agreed to annul the change of ownership. It is recommended that revised entries should be made to exports and imports for the period when the goods were initially recorded, so as to remove the voided transaction especially for returns of occasional, high-value goods. However, for statistical convenience, deductions from exports and imports may be made in the periods when the goods are returned for minor cases;

(i) Samples of no commercial value;

(j) Trade in goods between customs free zones and residents of the same economy; and

(k) Any other goods that have been included in the data source although there was no change of ownership.

d. Items to be excluded from general merchandise because they are included elsewhere

10.18 The following items are excluded from general merchandise because they are included in other components of the goods account or the services account:

- (a) Goods acquired and subsequently resold by residents but that do not enter the economic territory are shown separately as goods under merchanting, as discussed in paragraphs 10.41–10.51;
- (b) Nonmonetary gold, as bullion and other forms, is shown as a separate item within goods, as discussed in paragraphs 10.52–10.56;
- (c) Goods that are included in travel, as discussed in paragraphs [10.89–10.96];
- (d) Goods locally acquired for construction undertaken by enterprises that are nonresident in the territory of the location of the work. These goods are included under construction, as discussed in paragraph [10.104];
- (e) Devices, such as disks, with stored computer software or data, that have been customized to order are included under computer services, as discussed in paragraph [10.143];
- (f) Products such as packaged software (systems and applications), video and audio recordings, and so forth that are delivered on disks, magnetic media, or storage devices, but are obtained with a fixed-period license to use (so that they require ongoing periodic payments) rather than with change of economic ownership. (These products are included in computer or audiovisual and related services; see paragraphs [10.143(d)] and [10.163], respectively. For related products included in goods, see paragraph 10.12(c).);
- (g) Licenses to reproduce or distribute (or both) audio and video that are conveyed on physical media are included under charges for the use of intellectual property n.i.e., as discussed in paragraph [10.137]; and

- (h) Customized blueprints and nonbulk newspapers and periodicals sent on the basis of direct subscription are included in information services. (However, the bulk provision of newspapers and periodicals is included in general merchandise.)

d1. General and special trade

10.19 IMTS may be prepared on either a general or special trade basis:

- The general trade basis covers goods registered to enter the economic territory, including customs free zones (such as commercial free zones, industrial free zones, and premises for inward processing) and bonded customs warehouses. The general trade system is preferred in the United Nations *IMTS: Concepts and Definitions*. It is also preferable for external accounts statistics because it captures transactions involving goods for the whole economy and is more consistent with the coverage of the corresponding financing entries.
- The special trade basis in the strict sense covers goods cleared to enter the free circulation area only. If only special trade system data are available, adjustments are needed for goods movements into and out of customs free zones and customs warehouses.

g. Time of recording

10.20 Transactions involving general merchandise should be recorded at the time of the change of ownership of the goods. If corresponding financial account entries are made (such as currency and deposits or trade credit), goods would be considered to change ownership when parties record the sale or purchase of the goods in their books and make a corresponding change in their financial assets and liabilities.

10.21 *IMTS: Concepts and Definitions* recommends that the time of recording be based on when the goods enter or leave the territory, with the date of lodgment of the

customs declaration a suitable approximation. In practice, some data sources may be based on the time of processing the declarations, which is unsatisfactory if there are either long or variable lags in the time taken to process records. There will be lags between the time of export of a good and the time of its corresponding import arising from the period in which the goods are at sea or in transit through other countries. Ideally for balance of payments statistics purposes, source data would be adjusted by:

- (a) removing recorded merchandise movements that did not involve a change of ownership in the period, and
- (b) adding merchandise that changed ownership during the period but was recorded in the source data in earlier or later periods.

In practice, the timing of the change of ownership is usually assumed to be approximately the same as the time of customs recording.

High-value capital goods

10.22 The production of high-value capital goods such as ships, heavy machinery, and other equipment may take several months or years to complete. As with other goods, the transaction should be recorded at the time that economic ownership is conveyed from the seller to the buyer. The timing in data sources may or may not coincide with the change of ownership; for example, payments data are on the basis of stage payments, whereas customs data are on the basis of the time that the completed item crosses the customs frontier. A progressive transfer of ownership of the high-value capital goods would be evidenced if the buyer were to own the partially completed assets in case of, for example, bankruptcy of the producer. In this case, the output produced each period is recorded as a transaction between seller and the buyer. In the absence of information, the existence of stage payments could be

used as an indication of a progressive transfer of ownership. (If change of ownership differs from time of payment, accounts receivable/payable arise, as discussed in paragraph [5.71].)

Goods on consignment

10.23 *Goods on consignment are goods intended for sale, which are dispatched before they are sold.* Similarly, for goods sent for auction or for temporary storage before sale, the change of ownership may not occur until later. Such goods should not be included in the balance of payments until ownership changes, to avoid a source of discrepancies between the goods flow and the corresponding financial entries. However, if it is impractical to record the transactions in this way, they can be approximated by the time of recording in international merchandise trade statistics. If there is a substantial delay in the sale of the goods, it is good practice in major cases to make adjustments to the actual time of change of ownership.

h. Valuation

10.24 The principle for valuation of general merchandise is the market value or market price of goods at the point of uniform valuation. *The point of uniform valuation is where goods are valued at the exporter's border—that is, including the cost of insurance and freight incurred up to the point of the goods leaving the economy of the exporter.* This is a free-on-board type or FOB-type valuation. Market prices are discussed in paragraphs 3.141-3.142.

10.25 There may be cases where the application of FOB-type values is problematic, such as nonmonetary gold changing ownership without delivery, so a transaction value is used. Goods under merchanting and goods traded within a global manufacturing arrangement where the change of ownership differs from the country of dispatch or arrival of the goods, are problematic because, for instance, the goods may not enter the economy of the merchant

or the principal. For this reason, the goods should be valued at transaction prices as agreed by the parties. It is acknowledged that this may lead to some bilateral asymmetries in the valuation of the goods. These asymmetries are further elaborated in Annex 5.10.26 The terms of delivery of goods are the responsibility of the buyer and seller of goods under each contract. The arrangements made between exporters and importers vary. As a result, transaction prices agreed between exporters and importers include varying amounts of distribution costs, including none, some, or all of wholesaling, transport, insurance, and taxes. Data from international transactions reporting systems and business surveys use transaction prices, and so have a variable mix of valuation bases.

10.27 IMTS use FOB-type valuation as the statistical value of exports and CIF-type for imports. FOB-type valuations include:

- (a) FOB—at port on the frontier of the exporting country (for goods dispatched by sea or inland waterway);
- (b) “free carrier” (FCA)—at terminal on the frontier of the exporting country (for goods dispatched by means of transport to which FOB is not applicable); and
- (c) “delivered at frontier” of the exporting country (for goods dispatched by means of transport to which FOB and FCA are not applicable; e.g., when goods are exported by railroad or pipeline).

(Where the customs frontier is not applicable, such as where there is a single market, the territorial frontier is used in its place.)

10.28 CIF-type valuations include:

- (a) “cost, insurance, and freight” (CIF) at the border of the importing country; and
- (b) “carriage and insurance paid” to the border of the importing country.

10.29 To convert imports from CIF to FOB valuation for balance of payments purposes, the value of freight services and insurance premiums incurred from the frontier of the exporting country to the border of the importing country should be deducted. Ideally, CIF to FOB adjustment for imports should be obtained for each goods transaction, or at a detailed level. The relationship of FOB to CIF prices varies according to factors such as the type of good, weight, scale (bulk or not), special needs (such as refrigeration or careful handling), mode of transport, and the distance traveled. CIF to FOB ratios change over time, due to factors such as fuel prices, competition and technology in the transport industry, change in the proportion of different types of goods, and changes in source economies. For goods when the customs points of the exporting and importing territory are contiguous, the CIF and FOB values would be the same.⁵ The FOB valuation point means that export taxes are treated as payable by the exporter and that import duties and other taxes of the importing economy are payable by the importer. To the extent that this is not the case, adjustments like those for freight and insurance are necessary.

10.30 In some cases an estimate of a market equivalent price may need to be made. (See paragraphs [3.71–3.79] for more details.) For example, barter trade, aid goods, provision of goods between affiliated enterprises, under- or overinvoicing, goods on consignment or for auction, or where goods change ownership but a final price is determined later may all require adjustment to the goods value. Such adjustments may also require corresponding financial account items, such as trade credit; in the case of goods supplied by direct investors to their direct investment enterprise below cost or without charge, the corresponding entry is direct investment equity.

⁵However, for some merchandise trade between neighboring territories, insurance and freight costs may be incurred between the customs frontiers, such as for air shipments, or in other cases when either customs frontier is away from the border, such as where goods are cleared for customs in sealed containers from the point of dispatch.

10.31 Compilers should verify that realistic valuations have been used in customs declarations, rather than notional figures, such as zero, or a price that is small or highly rounded. In the cases when the price is determined later, subsequent adjustments should be made to take into account the final price when it becomes available. The recording of possible adjustments is discussed further in paragraph [3.73]. **10.32** Although the FOB-type valuation is recommended in this Manual, the valuation of imports and exports at the observed transaction value, or invoice value, is conceptually preferred and, subject to further testing and agreement of the parties involved, will be introduced as the standard in the next version of this *Manual*. Compilers are strongly encouraged to take steps towards the collection of invoice values (in addition to FOB values) as part of the collection of IMTS.

e. Deliveries between affiliated enterprises

10.33 Many cross-border movements in goods are between affiliated enterprises. The goods may be moved for processing, resale, and other purposes. The question may arise as to whether there has been a change of economic ownership. (For example, paragraph 10.17(f) covers the treatment of goods delivered for processing without a change of ownership; another example is where a direct investor temporarily provides equipment to its direct investment enterprise, possibly under an operating lease.) Whether there has been a change in economic ownership is determined according to the usual principle that the economic owner is the party that bears the risks and rewards of ownership. In cases where there has been a cross-border movement of goods between affiliated enterprises, but it is not known whether there has been a change in ownership, the following factors should be considered:

- When affiliated enterprises are separate legal entities, their transactions should be treated according to the parties' own arrangements as to whether there is a change of ownership or not.

- Between a quasi-corporation and its owner, legal title is not usually available as evidence of the nature of the movement of goods. The preferred treatment in this case is to identify which part of the legal entity assumes the risks and rewards of ownership, based on evidence such as which location has the goods recorded in its accounts and is responsible for the sale of the goods. The treatment should be consistent with reporting by the branch in business accounts and enterprise or establishment surveys.

10.34 Transactions between affiliated enterprises may give rise to issues of valuation, as discussed in paragraphs [3.77–3.78] and 10.30. Consequential effects on income are discussed in paragraphs [11.101–11.102].

i. Re-exports

10.35 *Re-exports are foreign goods (goods produced in other economies and previously imported) that are exported with no substantial transformation from the state in which they were previously imported.*⁶ The price of the re-exported good may differ from its price at the time it was originally imported, due to factors such as transport costs, dealer's margins, and holding gains or losses. For goods to be included in re-exports for balance of payments statistics, a resident must acquire and subsequently resell the goods with the goods passing through the territory. Goods that are bought and resold but do not pass through the territory of the unit initially purchasing the goods are included in goods under merchanting—see paragraph 10.41.

10.36 Goods in transit are not recorded in imports or in re-exports—see also paragraph [10.22(a)]. As well, goods cleared by customs, but re-exported without coming into ownership

⁶[For treatment of re-exports in IMTS, see United Nations, *IMTS: Concepts and Definitions 2010*, <https://www.un.org/en/development/desa/publications/international-merchandise-trade-statistics-concepts-and-definitions-2010-imts-2010.html>, paragraphs 2.17 and 2.18.]

by a resident of that economy, should not be included in re-exports for balance of payments statistics purposes. In contrast to re-exports, in the case of returned goods, there is no change of ownership or the parties later agree to annul the change of ownership (see paragraph 10.17(h)).

10.37 In cases where the state of the imported goods is substantially transformed, which could be indicated by a change in Harmonized System (HS) code,⁷ goods are recorded as domestically produced exports rather than re-exports (e.g., goods that have been assembled or processed, or goods that have become rags, waste, scrap, antiques). Used goods that were previously imported and retain the same HS code, but have suffered wear and tear, could in most cases be included in re-exports depending on the rules of origin that the economy applies. Whereas international recommendations⁸ on rules of origin exist, the origin of the goods will be determined at a national level. The case of imported goods processed without change of ownership is discussed in paragraphs 10.58 – 10.60 [and in chapter 11]. Goods temporarily imported or exported without a change of ownership, such as for repair or operating lease, are not included in either re-exports or re-imports, as discussed in paragraph 10.17(e).



10.38 Where possible, re-exports should be shown separately as a supplementary item, particularly in economies where re-exports are a significant proportion of exports. Because re-exported goods are not produced in the economy concerned, they have less connection to the economy than other exports. Economies that are major transshipment points and locations of wholesalers often have large values of re-exports. It may be of interest to derive the value of imports destined for re-export, calculated from re-exports with any timing adjustment. (Box 10.1 provides a numerical example of the entries for re-exports).

⁷ World Customs Organization, Harmonized Commodity Description and Coding System

⁸World Customs Organization, *International Convention on the Simplification and Harmonization of Customs Procedures (Revised Kyoto Convention)* https://www.wcoomd.org/-/media/wco/public/global/pdf/topics/facilitation/instruments-and-tools/conventions/kyoto-convention/revised-kyoto-convention/body_gen-annex-and-specific-annexes.pdf?la=en .

10.40 *Re-imports are domestic goods imported in the same state as previously exported, without any substantial transformation occurring on the goods while they were outside the territory.* Where significant, re-imports may be shown separately. Re-imports tend to arise in order to reverse a previous export, while re-exports generally arise because of transport, storage, or distribution through a territory other than that of the buyer or seller. For the goods to be included in re-imports, a nonresident must have acquired the goods, then resell them to a resident with the goods leaving and re-entering the territory. (In cases where there was no change of ownership, they are omitted from imports; e.g., goods for repair or goods sent for processing.)

C. Other Goods

a. Goods under merchanting

10.41 *Merchanting is defined as the purchase of goods by a resident (of the compiling economy) from a nonresident combined with the subsequent resale of the same goods to another nonresident without the goods being present in the compiling economy.*

Merchanting occurs for transactions involving goods where physical possession of the goods by the owner is unnecessary for the process to occur. (If guidance is needed about the meaning of same goods, the criteria in paragraphs 10.37 and 10.57 can be used.) The distinction between merchanting and global manufacturing arrangements is discussed in paragraph 10.80.

10.42 Goods under merchanting are recorded in the accounts of the owner in the same way as any other goods it owns. However, the goods are shown separately in international accounts statistics of the economy of the merchant because they are of interest in their own right and because they are not covered by the customs system of that economy.

10.43 The treatment of merchandising is as follows:

- (a) The acquisition of goods by merchants is shown under goods as a negative export of the economy of the merchant;
- (b) The sale of goods by merchants is shown under goods sold under merchandising as a positive export of the economy of the merchant;
- (c) The difference between sales over purchases of goods for merchandising is shown as the item “net exports of goods under merchandising.” This item includes merchants’ margins, holding gains and losses, and changes in inventories of goods under merchandising. As a result of losses or increases in inventories, net exports of goods under merchandising may be negative in some cases; and
- (d) Because the change of ownership differs from the physical flow of goods, merchandising entries are valued at transaction prices as agreed by the parties, not FOB (see paragraph 10.25).

(Box [10.1] provides a numerical example of the entries for goods under merchandising with minor processing.) **10.44** The partner allocation of net exports of goods under merchandising should be done by summing the positive and negative entries of goods under merchandising for each partner economy. ¹⁰

10.45 The rationale for recording goods for merchandising in the goods account and for treating purchases of goods for merchandising as a negative export rather than an import is as follows: firstly, the merchant acts similar to a wholesaler or a retailer whose output is measured by the trade margin realized on the goods they purchase for resale; next, the

¹⁰ When compiling country allocation of goods for merchandising, it is common to see negative net exports for economies from which the merchant acquires the goods.

treatment of the net exports as goods rather than services maintains a global trade in goods balance; and finally, if the amounts of the purchase and resale of goods were recorded as gross imports and exports of the merchant, this would artificially inflate the merchandise trade in the economy of the merchant.

10.46 The merchanting label is only used in the accounts of the economy in which the merchant is resident. In the counterpart exporting and importing economies, export sales to merchants and import purchases from merchants are included under general merchandise.

10.47 Inverse merchanting is a special case of merchanting, occurring when the entity that is selling to the nonresident merchant and the entity that is subsequently purchasing from the nonresident merchant are both resident in the same economy (the compiling economy) and where the goods do not leave and re-enter the compiling economy. For the economy of the merchant, this is recorded in the usual way as net exports of goods under merchanting. For the non-merchant economy, it may be challenging to identify inverse merchanting, because there are no physical cross-border flows. However, the goods account of the non-merchant economy should reflect that a change of economic ownership happens twice, first, when the goods are sold to the nonresident merchant and, second, when the goods are subsequently purchased from the nonresident merchant, and appropriate adjustments should be made if IMTS flows are used as a source.

10.48 Wholesaling, retailing, commodity dealing, and management of manufacturing may also be carried out under arrangements where the goods are present in the economy of the owner, in which case they are recorded as general merchandise, rather than as merchanting.

10.49 Sometimes a purchaser may be uncertain whether the goods will be resold to residents of the same economy or others. In this case, intentions can be used as an indicator, with subsequent adjustment if intentions are not realized.

10.50 When a merchant resells goods to a resident of the same economy as the merchant, this does not meet the definition of merchanting. Accordingly, the purchase of goods is shown as imports of general merchandise to the economy in that case. If the entity that purchased from a merchant in the same economy subsequently resells the goods to a resident of another economy, whether or not the goods enter the economy of the merchant, the sales of goods are recorded in exports of general merchandise from the economy where both the merchant and the entity that purchased the good from the merchant are resident. (Although such a case is very similar to merchanting, it does not meet the definition given above. In addition, it is impractical for the first merchant to record the purchases as merchanting because that merchant may not know whether or not the second merchant will bring the goods into the economy.)

10.51 Merchanting of nonmonetary gold is included under the nonmonetary gold item, discussed in paragraphs 10.52–10.56. This treatment means that the nonmonetary gold item is comprehensive and conceptually symmetric.

Box 10.1. Examples of Goods under Merchanting and Re-exports

Example 1—Merchanting with manufacturing services that do not change the condition of the goods

A resident of Economy A acquires books from a resident of Economy C for 10. The resident of Economy A has them sent to Economy B, without the books passing through Economy A, for a resident of Economy B to put in boxes, for a charge of 3 payable by the resident of Economy A. The books are then sold by the resident of Economy A to a resident of Economy D for 20.



Since the goods are in the same condition, the merchanting treatment applies. The goods and services account entries for Economy A would be:

| | |
|---|---------------------------|
| <i>Goods acquired under merchanting (from Economy C)</i> <i>(negative exports)</i> | <i>–10 Credit/Revenue</i> |
| <i>Goods sold under merchanting (to Economy D)</i> | <i>20 Credit/Revenue</i> |
| Net exports of goods under merchanting | 10 Credit/Revenue |
| Manufacturing services on physical inputs owned by others (with Economy B) | 3 Debit/Expenditure |


Economy C records goods exports of 10 to Economy A under general merchandise; Economy B records services exports of 3 with Economy A; and Economy D records goods imports of 20 under general merchandise with Economy A (goods under merchanting is only used for the economy of the merchant).

Example 2—Re-exports

A seaport in Economy A serves as a gateway hub for international trade for economies in the region. One practice is for car dealerships to set up near the port. Individuals can travel to the seaport and buy new and secondhand cars directly from the dealer in Economy A.

A car dealer of Economy A imports a car from Economy C for 1000. A resident of Economy B travels to the seaport and buys the car for 1200 driving home through Economy A to Economy B.


Since the goods are imported and subsequently exported, with a change of ownership happening twice in Economy A, and the goods pass through Economy A, the goods are recorded gross in the imports and exports of economy A as follows:

| | | |
|---|--|------------------------|
| | General merchandise imports (from Economy C) | 1000 Debit/Expenditure |
|  | General merchandise exports (to Economy B) | 1200 Credit/Revenue |
| | Of which Re-exports | 1200 Credit/Revenue |

(As the goods are in excess of customs thresholds in this example, they are included in general merchandise rather than in travel (see paragraphs 10.15 and [10.86]).

b. Nonmonetary gold

10.52 Nonmonetary gold covers all gold other than monetary gold. Monetary gold, as defined in paragraphs [5.74–5.75], is owned by monetary authorities and held as a reserve asset. Nonmonetary gold can be in the form of bullion (i.e., gold bullion takes the form of coins, ingots, or bars with a purity of at least 995 parts per 1,000 including such gold held in allocated gold accounts), gold powder, and gold in other unwrought or semimanufactured forms. Jewelry, watches, and so forth that contain gold are included under general merchandise, not nonmonetary gold. Nonmonetary gold sales and purchases that are not shipped are valued at transaction prices, not FOB. The price should include any dealer's margins or commissions not billed separately.

10.53  Allocated gold accounts are treated as being arrangements for the storage of gold bullion. A change in ownership of an allocated gold account holdings is, therefore, treated in the same way as gold bullion (see paragraph [9.18]). For the same reason, allocated gold accounts are not treated as deposits. If an entity puts gold it already owns into an allocated account, or withdraws gold from an allocated account without selling it, no change of ownership occurs so no transaction is recorded. In contrast, unallocated gold accounts are

financial assets (included under monetary gold or deposits, depending on the holder). As a result, a deposit of bullion to an unallocated gold account is shown as an exchange of nonmonetary gold for a financial asset; and a withdrawal is the reverse unless both parties are monetary authorities or international organizations. (See also paragraphs [5.76–5.77] on gold accounts and [9.18] on transactions in gold bullion.)

10.54 When both parties to a gold transaction are either monetary authorities that hold the gold as reserve assets or international financial organizations, gold sales are recorded as monetary gold in the financial account, as discussed in paragraph [8.55]. Otherwise, gold sales are recorded under nonmonetary gold.

10.55 Nonmonetary gold is shown separately from other goods because of the special role of gold in financial markets, because gold sales and purchases largely relate to existing stocks, and because the values of sales and purchases may be particularly large in some cases, such as gold dealing centers. In many cases, there is no physical delivery to the new owner, because the gold is held at specialized bullion storage centers. However, change in ownership is the criterion for the recording of nonmonetary gold, so gold sales and purchases should be recorded even when there is no physical movement.

10.56 Nonmonetary gold may be held either as a store of value or for other (industrial) purposes, such as manufacturing of jewelry or for use in dental work. When feasible, nonmonetary gold can be subdivided into gold held as a store of value and other (industrial) gold as supplementary data.

D. Global Manufacturing Arrangements



[Note: Content from this section is duplicated in section B of the 2025 SNA Chapter 23 which is a joint BPM/SNA chapter on Globalization. It is not intended to duplicate content within this Manual.]

10.57 A significant proportion of international transactions in goods are within global manufacturing arrangements whereby a principal manufacturer outsources the transformation of goods to a nonresident, possibly affiliated, manufacturing entity. Such arrangements can result in changes of ownership that differ from the physical flow of goods. Two distinct arrangements have emerged: processing arrangements and factoryless goods production. In both cases, the lead enterprise (the principal) has control over the design, selling price and other aspects of the global production process but outsources some or all of the manufacturing activities to a nonresident processor or contractor. The principal also retains ownership of critical inputs such as materials and/or intellectual property during the production process but material inputs and finished goods may never pass through the economy of the principal. In a processing arrangement the principal is considered a producer of goods while the processor provides a service (manufacturing services on physical inputs owned by others). Both the principal and the contractor in a factoryless goods production arrangement are considered producers of goods. Under these global manufacturing arrangements, material inputs are substantially transformed by the processor or contractor, which may be indicated by a change in HS code, or may have come about through the supply of intellectual property. Figures 10.1, 10.2 and 10.3 present illustrations and a decision tree and Box 10.2 provides some numerical examples.

Processing arrangement

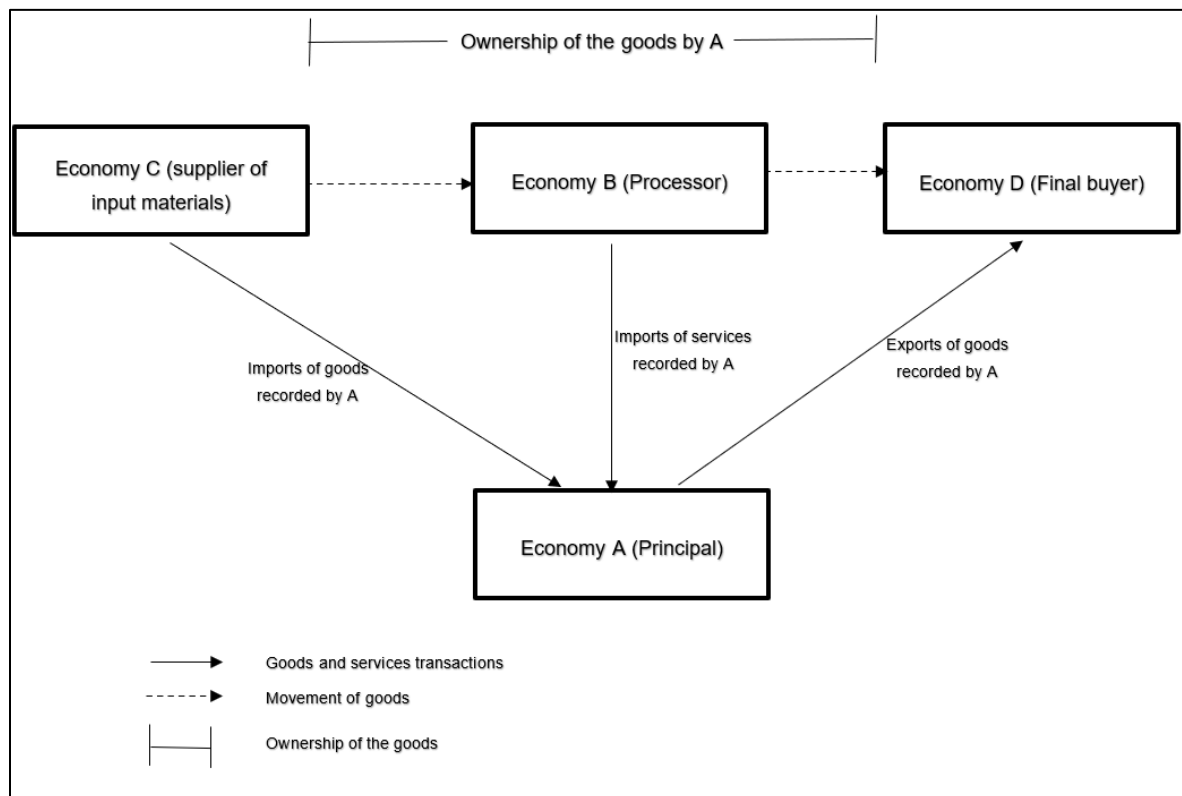
10.58 Under a processing arrangement, the principal owns or acquires material inputs and purchases manufacturing services (see paragraphs [10.62 to 10.64]), from a nonresident processor (who may provide some material inputs), to substantially change the goods. The ownership of the goods does not change during the manufacturing process. The finished goods are then returned to the principal, sent elsewhere for further processing or dispatched to final customers. In the simplest scenario, goods are sent physically abroad from the economy of the principal to the economy of the processor and returned after processing. In

this case, the movement of the goods are recorded in the IMTS of both economies, but no general merchandise transactions would be recorded in the goods account. Figure 10.1 illustrates a more complex example of a processing arrangement.

10.59 Goods transactions between the principal in a processing arrangement and other parties may be shown as a supplementary sub-item of general merchandise (see paragraph 10.77).

10.60 In some cases the processor provides other materials that are used in the manufacturing process alongside the material inputs owned by the principal. In many cases the principal supplies inputs of intellectual property such as product design without charging the processor for the right of use.

Figure 10.1. Goods for processing arrangement



The principal in Economy A purchases material inputs from Economy C. The goods are shipped to Economy B for further processing. The final goods are sold to Economy D. The principal has ownership of the goods during the processing, but the goods may not pass through Economy A during the production process.

There are variations of processing arrangements. Material inputs may also be sourced from Economy A, Economy B or Economy D. Similarly finished goods may be sold in Economy A, or to Economy B or Economy C. The key aspect in all variations is that the processor in Economy B does not take ownership of the goods during the processing. In all variations, the physical flow of goods differs from the change of ownership to some extent.

10.61 As there is no change of ownership of goods between the processor and the economy from which the goods have arrived or between the processor and the economy to which the goods are dispatched, no general merchandise transactions are recorded by the processor.

10.62 Purchases of material inputs (i.e., goods to be processed) by the principal in a processing arrangement may be obtained from residents of the same economy as the principal, the same economy as the processor, or a third economy. The treatment is as follows:

- (a) when the goods are acquired from residents of the same economy as the principal, there is no international transaction; and
- (b) when the goods are acquired from residents of the same economy as the processor or a third economy, the principal records imports of general merchandise.

10.63 Sales of finished goods (i.e., goods after processing) are treated as follows:

- (a) when the goods are sold to residents of the same economy as the principal, there is no international transaction; and
- (b) when the goods are sold to residents of the same economy as the processor or a third economy, the principal records the sale as exports of general merchandise.

10.64 The principal could report merchanting in the case of minor processing (see paragraph 10.42 and the decision tree in Figure 10.3).

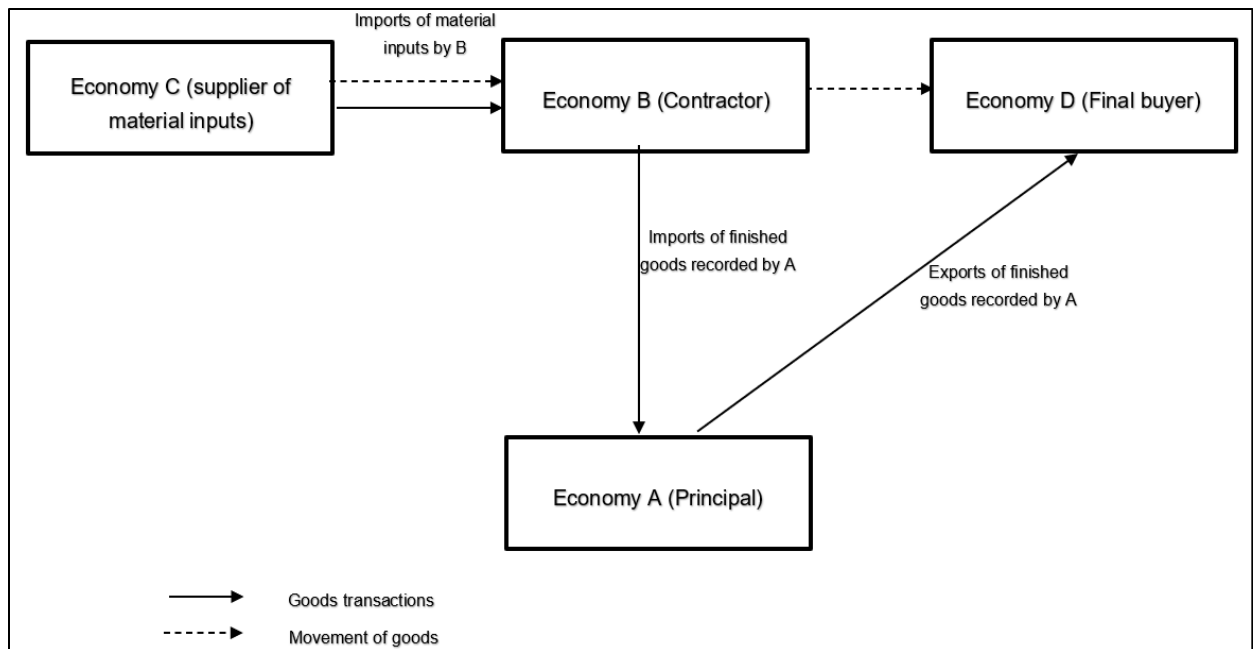
10.64a The manufacturing services fee that the processor charges the principal is shown in the services account (see paragraph 11.XX).

Factoryless goods production

10.65 *A factoryless goods producer is a principal that controls the production of a good by undertaking the entrepreneurial steps and providing the technical specifications required to produce the good, but that fully outsources the material transformation process required to produce the output.* The factoryless goods producer supplies inputs of intellectual property such as product design, without charging for the right to use the intellectual property, but outsources both the acquisition of all of the material inputs and the manufacturing process to a nonresident contractor. The factoryless goods producer buys the finished goods from the contractor at a price that includes the value of material inputs and processing but does not include the value of intellectual property used in the transformation process. The finished goods may be used by the principal as inputs into further production, sent elsewhere for further processing or dispatched to final customers. Figure 10.2 illustrates one example of a factoryless goods production arrangement.

10.66 Transactions between the factoryless goods producer and other parties may be shown as a supplementary sub-item of general merchandise (see paragraph **10.77**).

10.67 Under factoryless goods production, the material inputs are substantially transformed by the contractor. The role of intellectual property products (such as of research and development, design and innovation) provided by the principal to the contractor, without receiving a payment for right to use, should be significant. As a general guideline, the input values of intellectual property products as well as marketing assets (such as trademarks, brand names and logos) supplied by the factoryless goods producer will be at least as large the amount paid to the contractor less the cost to the contractor of the material inputs.

Figure 10.2 Factoryless goods production

The principal in Economy A supplies the design specifications but outsources the acquisition of the material inputs and the manufacturing to a contractor in Economy B. The contractor acquires the material inputs from Economy C. The contractor sells the finished goods to the principal at a price that includes the cost of the material inputs plus the manufacturing costs. The goods are then sold to the final buyer in Economy D at a price that will further reflect the input of the design specification or intellectual property by the principal. The final goods may be shipped directly from Economy B to Economy D without passing through Economy A.

There are variations of factoryless goods production. Material inputs may also be sourced from Economy A, Economy B, or Economy D. Furthermore, the principal may source the material inputs and sell them via merchanting to the contractor. Finished goods may also be sold in Economy A, or to Economy B, or Economy C. In all variations, the contractor has ownership of the material inputs and the principal supplies inputs of the intellectual property without charging for the right to use.

10.68 The goods that the factoryless goods producer buys from the contractor are recorded as general merchandise imports at the value agreed between the principal and the contractor. These goods are considered inputs to production of the factoryless goods producer.

10.69 Sales of finished goods are treated as follows:

- (a) when the goods are sold to residents of the same economy as the factoryless goods producer, there is no international transaction; and
- (b) when the goods are sold to residents of the same economy as the contractor or a third economy, the factoryless goods producer records the sale as exports of general merchandise.

10.70 There are no manufacturing services to record between the contractor and the principal in a factoryless goods production arrangement.

Sales of material inputs by the principal

10.71 Material inputs that the processor or contractor contribute to the manufacturing process may be acquired from the principal, in which case there is a change of ownership of goods between the principal and the processor or contractor. Materials may also be procured by the principal from abroad and sold to the processor or contractor in which case the principal may act also as a merchant. Where the principal sells goods directly or is engaged in merchanting to provide materials into the global manufacturing arrangement to the processor compilers may include these transactions in a supplementary item of general merchandise or supplementary items of goods under merchanting (see paragraphs 10.77 and 10.78).

Adjustments to the source data

10.72 In each of the economies where the change of ownership differs from the physical flow of goods, compilers may need to make adjustments to the source IMTS data. Adjustments that impact the total imports and exports should be shown in the table reconciling between merchandise trade data and total trade on a balance of payments basis (Table 10.2).

10.73 In a goods for processing arrangement, adjustments to the source data of each of the economies are needed to record changes of ownership between residents and nonresidents, and to remove flows where a change of ownership has not occurred.

10.74 In a factoryless goods production arrangement, if the contractor dispatches the goods directly to the final buyer, then compilers in the economy of the principal need to record the purchase and resale of finished goods that would not be included in the IMTS data. Also, in this scenario, the export value recorded by IMTS compilers in the contractor economy may be different from the price agreed between the principal and the contractor which should be recorded in the balance of payments, so adjustments to the value of exports may be needed in the contractor economy.

10.75 Under both processing and factoryless goods production arrangements, whenever the physical movement of goods differs from the change of ownership, adjustments to source data may further be needed to show the correct allocation of partner economy of goods on a balance of payments basis.

Box 10.2. Examples of Processing Arrangements and Factoryless Goods Production

Example 1 – Processing arrangement: Manufacturing services that change the condition of the goods

A resident of Economy A (the principal) acquires oil from a resident of Economy C for 10. The oil is sent to Economy B, without passing physically through Economy A, for refining by a resident of Economy B, for a charge of 15; the oil continues to be owned by the resident of Economy A. The oil is then sold to a resident of Economy D for 30.

Since the goods are not in the same condition, the merchanting concept does not apply. The goods account and services account entries for Economy A would be:

*General merchandise import (from Economy C) 10 Debit/Expenditure

*General merchandise export (to Economy D) 30 Credit/Revenue

Import of manufacturing services on physical inputs owned
by others (from Economy B) 15 Debit/Expenditure

(See also paragraphs [10.62–10.71] on manufacturing services and related issues associated with processing.)

Economy C records goods exports of 10 to Economy A, Economy B records only manufacturing services exports of 15 to Economy A (not exports or imports of goods), and as noted above, Economy D records goods imports of 30 from Economy A under general merchandise (not goods imports from Economy B).

Economy B may wish to identify the values of material inputs received and goods sent abroad after processing as supplementary items.

Example 2 - Factoryless goods production

A resident of Economy A (the principal, or factoryless goods producer) contracts the production of sportswear to a manufacturer in Economy B. The contractor in Economy B purchases the material inputs from Economy C for 3. The transformation of the material inputs by the contractor in Economy B is done under specifications provided by the principal. The principal purchases the finished sportswear from the contractor for 7 (which

was agreed as part of the contracting arrangement), and resells these goods directly to the final buyer in Economy D for 28 without the goods passing through Economy A.

The goods account entries for Economy A would be:

| | |
|---|---------------------|
| *General merchandise imports (from Economy B) | 7 Debit/Expenditure |
| *General merchandise exports (to Economy D) | 28 Credit/Revenue |

The goods account entries for Economy B would be:

| | |
|--|---------------------|
| General merchandise imports (from Economy C) | 3 Debit/Expenditure |
| General merchandise exports (to Economy A) | 7 Credit/Revenue |

Economy D and Economy C should record the counterpart transactions with Economy A and Economy B, respectively. No trade is recorded between Economy B and Economy D.

Example 3 - Factoryless goods production with material inputs acquired and resold under merchanting by the principal to the contractor

A resident of Economy A (the principal, or factoryless goods producer) contracts the production of sportswear to a manufacturer in Economy B. The principal sources the material inputs from Economy C for 3 and resells the material inputs to the contractor in Economy B for 4, without the goods passing through Economy A. As in Example 2, the transformation of the material inputs by the contractor in Economy B is done under

specifications provided by the principal. The principal purchases the finished goods from the contractor for 8, and resells these goods to the final buyer in Economy D for 28 without the goods passing through Economy A.

The goods account entries for Economy A would be:

**Goods acquired under merchanting (from Economy C) –3 Credit/Revenue
(negative exports)*

**Goods sold under merchanting (to Economy B) 4 Credit/Revenue*

Net exports of goods under merchanting 1 Credit/Revenue

**General merchandise imports (from Economy B) 8 Debit/Expenditure*

**General merchandise exports (to Economy D) 28 Credit/Revenue*

Economy C records goods exports of 3 to Economy A; Economy B records goods imports of 4 and goods exports of 8 with Economy A; and Economy D records goods imports of 28 from Economy A.


* Items marked with an asterisk are recommended to be shown separately as supplementary items for recording global production arrangements of Economy A (see paragraphs 10.77 and 10.78).

Providing information on global manufacturing to users

10.76 In order to make visible trading activities within a global manufacturing arrangement and to give insight into deviations from the IMTS source data, supplementary

sub-items in the balance of payments presentation may be recorded in the economy of the principal, where these activities are important (see Table 10.1).

10.77 A sub-item of general merchandise, “Goods traded within a global manufacturing arrangement” may be introduced to record transactions between the principal and other parties irrespective of whether the goods pass through the economy of the principal. Goods traded under a global manufacturing arrangement include the following general merchandise trade transactions:

- material inputs purchased by the principal from nonresidents in a processing arrangement (see 10.62);
- sales of finished goods to nonresidents in a processing arrangement (see 10.63);
- purchases of finished goods by a factoryless goods producer from the contractor (see 10.68);
-  sales by the factoryless goods producer of finished goods to nonresidents (see 10.69); and
- material inputs sold to a contractor or processor by the principal in a processing or factoryless goods production arrangement (see 10.71).

10.78 When, as a part of a global manufacturing arrangement, a factoryless goods producer acquires material inputs and sells them via merchanting to the contractor (see 10.71), supplementary sub-items of goods under merchanting are recorded as follows:

- (a) Goods acquired by the factoryless goods producer are recorded as negative exports under “Material inputs acquired abroad from third parties by the principal within a global manufacturing arrangement”; and

- (b) Goods sold by the factoryless goods producer to the contractor are recorded as exports under “Material inputs sold by the principal to the contractor abroad within a global manufacturing arrangement.”

Valuation of transactions in a global manufacturing arrangement

10.79 For goods traded within a global manufacturing arrangement (for instance transactions discussed in paragraph 10.77 and where the change of ownership differs from the physical movement of the goods, the application of FOB-type values does not apply. Instead, transport and insurance costs are shown as payable according to the arrangements of the parties; that is, the amount is payable by the party invoiced to pay the expense (see also paragraph 10.25). For the movement of goods not included in general merchandise, such as goods that the processor receives or dispatches with no change of ownership in a processing arrangement, a similar treatment applies, that is, the transport and insurance costs are shown as payable according to the arrangements of the parties.

Distinction between global manufacturing and global distribution arrangements

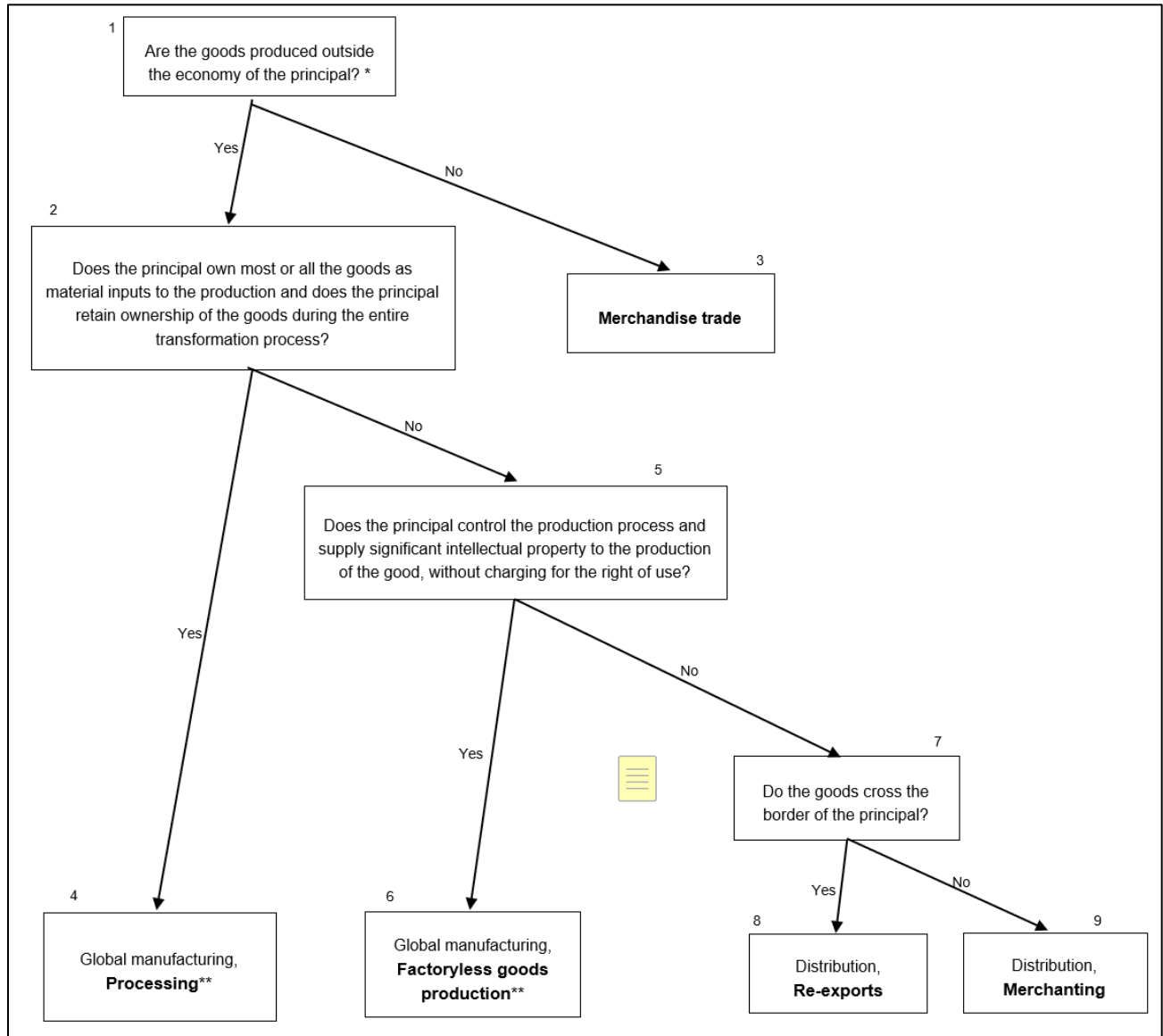
10.80 Merchanting and re-exports are used for wholesaling and retailing. They may also be used in commodity dealing and for the management of global manufacturing arrangements (see, for instance, 10.78). If the goods are substantially changed during the period the goods are owned, as a result of manufacturing services performed by other entities, or if the goods are the results of factoryless goods production, then the goods transactions are recorded under general merchandise and may be recorded as goods traded under a global manufacturing arrangement. In other cases where there is no substantial change to the goods, then the goods may be recorded as re-exports if they pass through the economy of the owner, and are included under merchanting if they do not pass through the economy of the owner, with the selling price reflecting minor processing costs as well as wholesale margins.

10.81 Factoryless goods producers, merchants and re-exporters may all purchase goods from nonresidents and sell the same goods to other nonresidents. The factoryless goods producer however controls the production process and supplies the intellectual property or the ‘knowhow’ for the production of the good. For this reason, a factoryless goods producer is considered a manufacturer and is different from a merchant or re-exporter, and the purchase of the finished goods from the contractor and subsequent sale to the final buyer are recorded gross under general merchandise in the economy of the factoryless goods producer (not as net exports under merchanting or re-exports).

10.82 Figure 10.3 presents a decision tree to identify whether an international transaction is traditional merchandise trade, or part of a processing arrangement, a factoryless goods production arrangement, re-exports or merchanting.



Figure 10.3. Global manufacturing and distribution arrangements decision tree



Notes:

* The decision tree is from the point of view of the principal enterprise that organizes or arranges the manufacture and/or movement of goods between different economies and has ownership of the goods at some stage.

** Supplementary items are recorded in global manufacturing arrangements (see 10.77).

E. Additional Breakdowns and Supplementary Presentations of the Goods Account

10.83 General merchandise is shown as a single item in the standard components. This Manual encourages additional presentations according to the priorities of the compiling economy.

10.84 More detailed breakdowns could include major products (or commodities), major product groups, industry of origin, and broad economic categories. The international standard product (or commodity) classifications include the Harmonized System (HS), the Standard International Trade Classification, the Central Product Classification (CPC) and the Broad Economic Categories (BEC).¹² In addition, or alternatively, cross-references could be made to additional details available in other trade in goods publications, while noting coverage, timing, valuation, and classification differences.

10.85 For comprehensive and integrated data on international trade and globalization, insights into the types of enterprises that are engaged in cross-border trade is important. Disaggregation of total exports and imports of goods by characteristics of the trading enterprise (known as Trade by Enterprise Characteristics) is recommended as a supplementary presentation to highlight the role of enterprises with different characteristics in the current account. Characteristics such as ownership, size of enterprise, and geographical diversification are themes that can be developed in these statistics. This is discussed further in Chapter 15 within the context of multinational enterprises.

¹²World Customs Organization, *Harmonized Commodity Description and Coding System*. United Nations, *Standard International Trade Classification*. United Nations, *Central Product Classification*, *Broad Economic Categories*.

10.86 A supplementary presentation of the goods account classified by currency to be published at least annually is recommended. Currency composition of international trade is discussed further in Annex 5.

F. Reconciliation between Merchandise Trade Data and Total Goods on a Balance of Payments Basis

10.87 It is a good practice for compilers to produce and publish a reconciliation table of the differences between merchandise trade statistics and goods on a balance of payments basis. A sample reconciliation table is shown in Table 10.2. Such a table ensures transparency and avoids confusion and doubts as a result of different sources, coverage, classification, valuation, timing, and so forth. It illustrates for users the conceptual differences between merchandise trade data and total goods on a balance of payments basis and is a useful tool for analysis of global value chains. It is recommended that the reconciliation table is published by compilers of balance of payments statistics at least on an annual basis.

10.88 The table summarizes the steps taken in compilation. Some of the items are discussed in more detail in this chapter above (and paragraph references are given). [Chapter XXIV] of *IMTS: Compilers Manual, Revision 1* and [Annex F] of *IMTS 2010* list differences between IMTS and *BPM6* standards. In addition to changes from *BPM6* in this *Manual*, other adjustments may arise if there are differences between IMTS and the national practices for coverage of international merchandise trade statistics.

| Table 10.2. Reconciliation between Merchandise Source Data and Total Goods on a Balance of Payments Basis | | |
|---|-------------|-------------|
| | Exports | Imports |
| Merchandise trade statistics as provided in source data | | |
| Adjustments, as relevant¹ | | |
| | | |
| Valuation adjustments | | |
| – CIF/FOB adjustment (10.29) | <i>n.a.</i> | |
| ± High-value capital goods, if delivery differs from change of ownership (10.22) | | |
| Adjustments arising from the change of economic ownership principle | | |
| ± Goods lost or destroyed in transit (10.12(p)) | | |
| ± Goods changing ownership in customs warehouses or other special zones (10.19) | | |
| - Migrants' personal effects (10.17(b)) | | |
| - Returned goods (10.17(h)) | | |
| - Goods for repair or storage without change of ownership (10.17(e)) | | |
| Adjustments relating to merchanting and global manufacturing arrangements | | |
| + Net exports of goods under merchanting (10.44(c)) | | <i>n.a.</i> |
| + Exports to and imports from a merchant in an economy of inverse merchanting (10.47) | | |
| + Goods sold to or purchased from a nonresident principal within a processing or factoryless goods production arrangement, without the goods leaving the reporting economy (see 10.17(i)) | | |
| - Dispatches of goods from, or arrivals of goods to, either the economy of the principal or the economy of the processor without change of ownership in a processing arrangement (10.61) | | |
| + Goods acquired from other economies for processing abroad, and goods sold abroad after processing, without the goods passing through the economy of the resident principal (10.12j, 10.62, 10.63) | | |
| + Acquisition and sale to other economies of finished goods by a factoryless goods producer without the goods passing through the economy of the factoryless goods producer (10.58, 10.68, 10.69) | | |
| ± Adjustment to the contractor's valuation of exports of finished goods to a factoryless goods producer if different from IMTS valuation of dispatches to final buyer (10.74) | | <i>n.a.</i> |


| | | |
|--|--|--|
| Other conceptual adjustments | | |
| - Goods imported for construction projects by nonresident enterprises (10.22(d)) | | |
| + Goods changing ownership entering / leaving territory illegally (10.17(i) / (j)) | | |
| + Nonmonetary gold sales and purchases that are not shipped (10.50-54) | | |
| | | |
| = Total goods on a balance of payments basis | | |
| <p>¹This list is not comprehensive, but indicative of commonly made adjustments. The table should be read in parallel with the list of inclusions and exclusions recommended in Chapter 1 of <i>IMTS 2010</i>. Some of the adjustments listed may be unnecessary because international merchandise trade statistics data for the economy may treat the item in the same way. For example, an adjustment for goods entering or leaving customs warehouses is not necessary if data are sourced from international merchandise trade on a general trade basis. Furthermore, other adjustments not shown in Table 10.2 may be needed to account for gaps in the compiling economy's IMTS data. For example, if the compiling economy does not include fish catch or minerals from the seabed and salvage, then compilers would need to make adjustments to include these transactions if they are significant for the economy.</p> | | |

Chapter 11. Services Account^Ψ

(New BPM chapter, split from existing Chapter 10: Goods and Services Account)

Chapter 11 Services Account

References:

United Nations and others, *Manual on Statistics of International Trade in Services*, especially Chapter III, Services Transactions Between Residents and Non-residents. 

United Nations World Tourism Organization, *International Recommendations on Tourism Statistics and The Tourism Satellite Account: Recommended Methodological Framework*.

1. Concepts and coverage

10.8 11.1 *Services are the result of a production activity that changes the conditions of the consuming units, or facilitates the exchange of products or financial assets.* The focus of the services account in the balance of payments is the point at which services are exchanged between a resident and a nonresident.

11.2 *Services are not generally separate items over which ownership rights can be established and cannot generally be separated from their production.* However, as seen later in this chapter, some knowledge-capturing products, such as computer software and other intellectual property products, may be traded separately from their production, like goods. The cross-border transactions in those products (e.g., computer software, audiovisual products, research and development, and other intellectual property products and/or knowledge capturing products) are

^Ψ **Note:** This Chapter is concurrently undergoing [Global Consultation](#).

also recorded as services in balance of payments—excluding when provided on physical media with right to perpetual use (see paragraph 10.17c). In addition, cross-border transactions concerning the use of property rights related to marketing assets (such as franchises, trademarks, and brand names) are recorded as services. For discussion on the conceptual issues relating services in the context of national accounts, refer to paragraphs 7.xx,-7.xx, 2025 SNA.

11.3 Knowledge-capturing products concern the provision, storage, communication and dissemination of information, advice and entertainment in such a way that the consuming unit can access the knowledge repeatedly. They have many of the characteristics of goods in that ownership rights over these products can be established and they can be used repeatedly. Whether recorded as goods or services, these products possess the essential common characteristic that they can be produced by one unit and supplied to another.

11.57 Following the general principles in paragraph 3.47, the time of recording of service entries in the external accounts is the time at which the service is delivered. The provision of services should be recorded on an accrual basis in each accounting period, that is, they should be recorded as they are rendered. Payment may be made up front, at the end, or as progress payments. To the extent that the time of payment differs from the time of delivery, there may be trade advances (financial assets/liabilities that are extinguished as the service is provided) or trade credit (financial assets/liabilities that arise as the service is provided).

11.58 Services provided by a self-employed individual such as a consultant, independent contractor, or employment agency are distinguished from remuneration of employees. Paragraphs 12.11–12.13 discuss the difference between an employee and a service provider. 11.59 Business and other services, such as transport, construction, and computing, may be subcontracted, that is, when a

company contracts another (specialist) company to provide the services they have agreed to provide to a customer. When a company contracts another company to provide services that were previously internal company functions, this arrangement may be called "outsourcing." Services that are subcontracted or outsourced should be classified to the appropriate specific services item, such as transport, construction, computing, or technical and business services (see also paragraph 10.75 for transport). The value of services exported and imported in the economy of the service arranger is recorded on a gross basis. (This treatment is applicable because the arranger buys and sells the services; if the arranger acted as an agent on a commission basis, then only the commission would be recorded as the service provided by the arranger—see paragraph 11.150-1). However, if the activity is significant for an economy, net data could be provided on a supplementary basis. Services supplied by "call centers" and similar types of operations should be classified according to the type of service provided. For example, call centers selling products are included in trade-related services, whereas call centers providing computer support are included in computing services.

Other international standards relevant for trade in services

11.60 The *Manual on Statistics of International Trade in Services (MSITS)* is a source of additional information for compilers of international trade in services data. *MSITS* uses the same conceptual framework as the *2025 SNA* and this *Manual*. *MSITS* responds to information needs related to the General Agreement on Trade in Services (GATS) and other trade agreements, as well as growing information needs of governments, business, and analysts. It describes the four modes² through which

² The four modes of supplying services are: cross-border supply (services delivered from one country to another), consumption abroad (consumers traveling to another country for services), commercial presence (a foreign company's local branch or subsidiary providing services), and presence of natural

services can be supplied internationally, and as such extends the meaning of trade in services to cover services delivered through locally established enterprises (see Chapter 15 Globalization). Building on the services classification included in this *Manual*, *MSITS* provides a further breakdown of the classification of transactions by type of services through the Extended Balance of Payments Services (EBOPS) Classification. . For more details, see *MSITS*, ³.



2. Classification

11.61 An overview of the classification of services is shown in Table 11.1. The classification is mainly product-based, but is transactor-based for travel, construction, and government goods and services n.i.e. The classification is according to the type of service, rather than the unit that provides it;⁴ for example, if a bank provides pension fund services as a secondary activity, the service is classified as pension fund services. A correspondence between the **CPC** and services classification is given in [*MSITS*]. The detailed listing of CPC items included in each service item in [*MSITS*] can be used to classify any services not specified in the following text to the appropriate external accounts service item.

persons (individuals temporarily traveling to another country to provide services). See Section B, Chapter V, *MSITS, 2010* for additional details.

³ *MSITS* will be updated to incorporate the updates from the *2025 SNA* and this *Manual*.

⁴ This is only relevant for product-based categories.

| Table 11.1 Overview of the Services Account | | |
|--|-------------------------|----------------------------|
| | Exports | Imports |
| | (credit/revenue) | (debit/expenditure) |
| Manufacturing services on physical inputs owned by others | | |
| Maintenance and repair services n.i.e. | | |
| Transport | | |
| Travel | | |
| Construction | | |
| Insurance and pension services | | |
| Financial services | | |
| Charges for the use of intellectual property n.i.e. | | |
| Telecommunication services | | |
| Computer and information services | | |
| Research and development services | | |
| Professional and management consulting services | | |
| Trade-related services | | |
| Operating leasing services | | |
| Technical and other business services | | |
| Personal, cultural, and recreational services | | |
| Government goods and services n.i.e. | | |
| Balance on international trade in services | | |
| Note: This table is expository; for standard components, see Annex 14. | | |

a. Manufacturing services on physical inputs owned by others

11.62 *Manufacturing services on physical inputs owned by others cover processing, assembly, labeling, packing, and so forth undertaken by enterprises that do not own the goods concerned.* The manufacturing is undertaken by an entity that does not own the goods and that is paid a fee by the principal (processing arrangement, see paragraphs 10.xx-xx). In these cases, the ownership of the goods does not change, so no general merchandise transaction is recorded between the processor and the principal (see Figure 10.1) Manufacturing services on physical inputs owned by others is distinguished from factoryless goods production in which the processor acquires ownership of the goods. See Section D, Chapter 10 for additional details.

11.63 Examples of processes that are often undertaken under arrangements for manufacturing services on physical inputs owned by others include oil refining, liquefaction of natural gas, assembly of clothing and electronics, assembly (excluding assembly of prefabricated constructions, which are included in construction), labeling, and packing (excluding those incidental to transport, which are included in transport services).

11.64 Manufacturing services on physical inputs owned by others cover the transaction between the principal and processor, and only the fee charged by the processor is included under this item. The fee charged may cover the cost of materials purchased by the processor. Manufacturing services on physical inputs owned by others refer to all work done on goods by a resident of one economy for the owner of goods (principal) who is resident in another economy; the treatment of these services is not conditional on whether the goods were previously or

subsequently in the physical possession of the principal or not.⁵ For details on the recording of related purchases and sales of goods, refer to paragraphs 10.xx.xx. The recording of related goods movements is explained in paragraphs 11.xx-xx.

11.70 The value of manufacturing services on physical inputs owned by others is not necessarily the same as the difference between the value of goods sent for processing and the value of goods after processing. Possible causes for differences include holding gains or losses, the inclusion of overhead expenses (such as financing, marketing, and know-how included in the finished good price), and measurement errors associated with the valuation of goods movements where there is no sale (see paragraph 12.14, *BPM6 Compilation Guide*).

Recording of related goods movements

11.67 The gross values of goods associated with processing services can be identified as supplementary items in economies where they are significant. Whereas the manufacturing service is consistent with what is recorded in business accounts and actual transactions, the gross values of the physical movements of goods without a change of ownership are useful for analysis of processing activities. Values of the following items may be identified:

(a) for principals (customers of manufacturing services on goods processed abroad, with no change of ownership to the processor):

- goods supplied for processing (goods sent); and
- goods dispatched after processing (goods returned);

⁵ For further details refer to Boxes 10.1 and 10.2, Chapter 10.

(b) for processors (providers of manufacturing services on goods processed in the compiling economy):

- goods received for processing (goods received); and
- goods dispatched after processing (goods sent).

11.68 A market-equivalent valuation for goods supplied or received might be required. Gross values of the goods are shown after processing, and again a market-equivalent valuation might be required. The value of goods input and dispatched could be reported either by the principal or supplier (processor) of manufacturing services, or from customs data:

- If the values are reported by the principals or processors, coverage should be irrespective of whether the input goods were supplied by the principal from the principal's territory, the processor's territory, or a third territory; or whether the goods are dispatched to the owner's territory, the processor's territory, or a third territory.
- If reported from customs, coverage may be incomplete to the extent that some inputs and some processed goods provided by the principal do not pass through customs. For example, goods sourced or sold locally will not be covered. Additionally, customs may not separately identify goods as being subject to processing. Therefore, efforts should be made to collect data to distinguish the nature of those transactions.

There may be interest in breaking down these values by product or product groups.

11.69 Transport costs may be incurred on movements of goods undergoing processing. How these transport services are recorded is determined from the following factors:

- (a) for goods included in general merchandise (i.e., in the cases mentioned in paragraphs 10.xx–10.xx), general principles for FOB valuation apply, so that transport costs up to the customs frontier of the exporting economy are treated as being payable by the exporter and transport costs after the frontier are treated as payable by the importer; and
- (b) for goods not included in general merchandise (such as materials delivered from the owner to the processor with no change of ownership), transport costs are shown as payable according to the arrangements of the parties; that is, the amount is payable by the party invoiced to pay the expense.

b. Maintenance and repair services n.i.e.

11.72 Maintenance and repair services n.i.e. cover maintenance and repair work by residents on goods that are owned by nonresidents (credit) and that by nonresidents on goods that are owned by residents (debit). Maintenance and repair services n.i.e. cover both minor repairs that maintain the good in working order and major repairs that extend the efficiency or capacity of the good or extend its life.⁶ No distinction is made between those repairs included by the customer in intermediate consumption and those in capital formation. The repairs may be performed at the site of the repairer or elsewhere. Repairs and maintenance on ships, aircraft, and other transport equipment are included in this item. Cleaning of transport equipment

⁶ This includes modifying or upgrading various systems or components to meet new regulations, enhance operational capabilities, or extend the lifespan of ships, aircraft, and other transport equipment (known as retrofitting).

is included in transport services (see paragraph 10.80). Construction maintenance and repairs are excluded; they are included under construction. Maintenance and repairs of computers are included under computer services.

11.73 The value recorded for maintenance and repairs is the value of the work done—not the gross value of the goods before and after repairs. The value of maintenance and repairs includes any parts or materials supplied by the repairer and included in the charge. (Parts and materials charged separately should be included in general merchandise.) As noted in **paragraph 10.22**, goods leaving from, arriving in, and returning to a territory for repair, processing, or other activity without a change of ownership are excluded from general merchandise.

c. Transport

11.74 *Transport is the process of carriage of people and objects from one location to another as well as related supporting and auxiliary services. Also included are postal and courier services.* Transport can be classified according to:

- (a) mode of transport, namely, sea, air, or other (“other” may be further broken down into rail, road, internal waterway, pipeline, and space transport as well as electricity transmission); and
- (b) what is carried—passengers or freight.

Services that are auxiliary to transport and not directly provided for the movement of goods and persons are covered under other transport services (see paragraph 11.80).

In the standard components, transport is classified according to both dimensions. A breakdown of total transport services into passenger transport, freight

transport, and other transport alone is proposed as simplified standard components for those countries that are unable (e.g., for reasons of confidentiality) to provide the full breakdown by mode of transport.

11.75 A transport provider may subcontract to use the services of other operators to provide part of the final transport service. Such services should be recorded on a gross basis. For example, a courier service provider might contract separately to more than one transport operator. In contrast, transport services may also be subject to intermediation arrangements. In these cases, any commissions payable by providers of transport services to an agent should be separately recorded as trade-related services, see paragraphs 11.59 and **11.98**.

Passenger services

11.76 Passenger services cover the transport of people. The category covers all services provided in the international transport of nonresidents by resident carriers (credit) and that of residents by nonresident carriers (debit) through any mode of transport (see 11.74 a). Also included are passenger services performed within a territory by nonresident carriers. Passenger services provided within a territory by residents to nonresidents and provided or purchased separately from international transport are excluded from passenger transport; these services are included in travel.

11.77 Passenger services include fares and other expenditure related to the carriage of passengers. They also include any taxes levied on passenger services, such as sales or value-added taxes. The valuation of passenger transport should include fees payable by the carriers to travel agencies and other providers, as well as any taxes levied on passenger services, such as value-added taxes. Passenger services include fares purchased as a part of package tours (**see Box 11.2**). Cruise

fares are included in travel. Passenger services include such items as charges for excess baggage, vehicles, or other personal accompanying effects and food, drink, or other items purchased on board carriers. Also included in passenger services are rentals, charters, and leases of vessels, aircraft, coaches, or other commercial vehicles with crews for the carriage of passengers. Excluded are rentals or charters that are financial leases (included in loans), and rentals and time charters without crew (included in operating leasing services—see paragraphs 11.153-157).

Freight services


11.78 Freight services cover the transport of objects other than people.⁷ The treatment of freight services is a consequence of adopting FOB as the uniform valuation principle for exports and imports of goods. As discussed in paragraphs 10.31–10.34, FOB valuation is at the customs frontier of the exporting economy, so:

- (a) all freight costs up to the customs frontier are shown as incurred by the exporter, and
- (b) all freight costs beyond the customs frontier are shown as incurred by the importer.

In addition to freight on exports and imports, freight transport services may relate to goods where there is no change of ownership, such as goods sent for storage or processing and migrants' personal effects. Also included are freight services provided by nonresident carriers within the domestic economy and vice versa.

⁷ In general, transport of animals is recorded under freight, but small pet animals carried with their owners could be included under passenger services.

11.78-1 Rentals, charters, or operating leases of vessels, aircraft, freight cars, or other commercial vehicles with crews for the carriage of freight are included in freight services. Also included are towing and services related to the transport of oil platforms, floating cranes, and dredges. Financial leases of transport equipment are excluded from transport services (see paragraphs 5.56–5.59 and 10.17(f)).

11.79 When actual arrangements for paying freight costs differ from FOB terms of delivery, rerouting is needed, as defined in **paragraph 3.16**. Rerouting of freight services may mean that a transaction that is actually between two residents is treated as a transaction between a resident and a nonresident, and vice versa, as shown in **Box 11.1**. The timing of the provision of freight services may differ from the timing of the change of ownership of those goods, such as goods sent abroad on consignment where the sale occurs in a different accounting period from when the goods crossed the exporter's customs frontier. In principle, freight services should be recorded in the period  they are rendered but are attributed to the importer in the period when the goods are purchased. However, in practice, the aggregated nature of recording of freight services and lack of information on individual freight movements means that timing adjustments to deal with this issue may not be feasible, material, or appropriate (e.g., if the importer pays for the service in the period it is rendered).

Box 11.1. Numerical Examples of the Treatment of Freight Services

A piece of equipment costs 10,000 units at the factory at which it was produced in Economy A. It costs 200 to transport it to the customs frontier of Economy A, 300 to transport it from the customs frontier of Economy A to the customs frontier of Economy B, where a customs duty of 50 is levied, and it costs 100 to deliver it from the customs frontier to the customer. (For simplicity, insurance of the equipment during transport is not covered in the example.)

Under all contractual arrangements between the parties, the FOB value is 10,200 and the CIF value is 10,500. However, how the related services components are recorded depends on the arrangements for paying the transport costs and the residence of the transport provider. A few of the possible arrangements are discussed below:

Example 1:

The parties contract on an FOB basis (i.e., the invoice price is 10,200; the exporter is responsible for costs up to the frontier of A and the importer is responsible for subsequent costs). In this case, no rerouting is needed. All freight is shown as being provided by the actual provider and payable by the actual invoiced party.

Example 2:

The parties contract on an “ex works” basis (i.e., the invoice price is 10,000; the buyer pays for transport from the seller’s premises).

- The freight from the factory to the customs frontier of Economy A is provided by a resident of Economy A. The 200 payable, which is actually a service provided by a resident of Economy A and payable by a resident of Economy B, must be rerouted to be shown as a resident-to-resident transaction within A, as all costs up to the frontier of the exporting economy are treated as being payable by the exporter and included in the price of the goods.
- The freight from the factory to the customs frontier of Economy A is provided by a resident of Economy B. The 200 payable, which is actually a domestic service transaction within Economy B, must be rerouted as being a service provided from B to A, as all costs up to the frontier of the exporting economy are treated as being payable by the exporter.

Example 3:

The parties contract on a CIF basis (i.e., the invoice price is 10,500). The 300 payable for freight from the customs frontier of Economy A to that of Economy B is rerouted, because the contract makes it payable by the exporter, but it is treated as payable by the importer in balance of payments statistics (i.e., following FOB valuation). As a result, if the freight provider is a resident of A, a domestic transaction within A is treated as being a balance of payments transaction. Conversely, if the freight provider is a resident of B, an international transaction is treated as being a domestic transaction within B.

It is not normally possible to study every contract, so general patterns of freight cost arrangements need to be identified. When contract terms other than FOB are used, actual payment arrangements for freight may need adjustments to meet the FOB valuation convention.

In all cases where apparently domestic transactions are rerouted to be recorded as international transactions, or vice versa, goods trade must be recorded on a consistent basis, so that the financial payment from B to A equals the sum of its goods and services imports, both before and after rerouting adjustments. (If the goods are recorded at FOB values, the adjustments to freight bring them into consistency with goods; if the goods are recorded at transaction values, the goods values need corresponding adjustments.)

Other transport services

11.80 Other transport services include services that are auxiliary to transport and not directly provided for the movement of goods and persons. The category includes cargo handling charges billed separately from freight, storage and warehousing, packing and repackaging, towing not included in freight services, pilotage and navigational aid for carriers, air traffic control, cleaning performed in ports and airports on transport equipment, and salvage operations.

11.80-1 The services of freight forwarders are also included in this category. Freight forwarders arrange the transportation of goods and related logistics on behalf of shippers (clients) to ensure that goods reach their destination efficiently. Their services output is measured in terms of the total revenue they generate, net of associated expenses.

11.81 Some related activities are excluded from transport: freight insurance (included in insurance services); goods procured in ports by nonresident carriers (included in goods); maintenance and repairs on transport equipment (included in maintenance and repair services n.i.e.); and repairs of railway facilities, harbors, and airfield facilities (included in construction); agents'

fees including the fees of nonfinancial intermediation platforms associated with transport (included in trade-related services).

Postal and courier services

11.82 Postal and courier services cover the pick-up, transport, and delivery of letters, newspapers, periodicals, brochures, other printed matter, parcels, and packages. It also includes post office counter services such as sales of stamps and money orders, poste restante services, telegram services, and mailbox rental services. Postal and courier services facilitate parcel trade, where consumers purchase goods online and receive them through parcel delivery.

11.83 Excluded are financial services rendered by postal administration entities, such as postal giro, banking and savings account services (recorded under financial services), mail preparation services (recorded under technical and other business services), and administration services related to postal communication systems (included in telecommunication services). Postal services are subject to international agreements, and the service entries between operators of different economies should be recorded on a gross basis. Postal services provided to travelers are included in travel.

11.84 Courier services include express and door-to-door delivery. Express delivery services might include, for example, on-demand pick-up or time-definite delivery. Excluded are the movement of mail carried by air transport enterprises (recorded under transport, air, freight), storage of goods (recorded under transport, other, auxiliary and supporting services), and mail preparation services (recorded under technical and other business services).

11.85 The principles for recording postal and courier services on exports and imports of merchandise are the same as for other freight services, as

discussed in **Box 11.1**. This treatment is a consequence of the FOB valuation of the goods concerned. The principles for recording postal and courier services on other items, such as documents, personal effects, and goods for repair, are that the service is payable by the party responsible for payment. Courier services may encompass combinations of road, sea, air, and other methods of transport.

d. Travel

11.86 *Travel credits cover goods and services for own use or to give away acquired from an economy by nonresidents during visits to that economy. Travel debits cover goods and services for own use or to give away acquired from other economies by residents during visits to these other economies.* The goods and services may be purchased by the persons concerned or by another party on their behalf. For example, business travel may be paid or reimbursed by an employer, tuition and living costs of a student may be paid by a government, or health costs may be paid or reimbursed by a government or insurer. Goods and services supplied by the producer without charge are also included, such as tuition and board provided by a university. In addition, goods and services provided free to nonresidents by government and NPISHs of the economy they are visiting known as social transfers in kind⁹ (e.g., free health services received by a foreign tourist from a hospital within general government) should be imputed and recorded under travel.

11.87 The standard component breakdown of travel is between business and personal travel, with supplementary data for groups of special interest, such as border, seasonal, and other short-term workers. A separate supplementary

⁹ Social transfers in kind consist of goods and services provided to households by government and NPISHs either free or at prices that are not economically significant (paragraph 9.xx, 2025 SNA)

breakdown of travel into types of goods and services is suggested (see paragraph 10.95).

11.88 Unlike most other service categories, travel is not a specific type of service, but a transactor-based component that covers an assortment of goods and services. In the case of travel, the consumer moves to another territory to consume the goods and services that he or she acquires. For these reasons, travel is not identified as a service in the CPC. Goods and services provided to visitors while on their trips that would otherwise be classified under another item such as postal services, telecommunications, local transport, hire of equipment, or gambling are included under travel.

11.89 Goods or services acquired by persons undertaking study or medical care while outside their territory of residence are included in travel. Acquisitions of goods and services by border, seasonal, and other short-term cross-border workers in their economy of employment are also included in travel.¹⁰ Acquisitions of goods and services by diplomats, consular staff, military personnel, and so forth and their dependents (but not locally engaged staff and their dependents) in the territory in which they are posted are included under government goods and services n.i.e.

11.90 Travel excludes goods for resale, which are included in general merchandise. The acquisition of valuables (such as jewelry), consumer durable goods (such as cars and electronic goods), and other consumer purchases for own use or to give away that are included in customs data in excess of customs thresholds is included in general merchandise. (The inclusion of these goods in general merchandise is discussed in **paragraph 10.18**.) Valuables and consumer

¹⁰These acquisitions are not considered as tourism expenditure, so showing them separately as supplementary items allows travel data from the balance of payments to be reconciled with tourism statistics.

durables that have not been included in general merchandise data should be included in travel (e.g., locally acquired goods kept in a vacation home). Travel includes local transport (i.e., transport within the economy being visited and provided by a resident of that economy), but excludes international transport (which is included in passenger transport; see paragraph 10.76).

Business travel

11.91 *Business travel covers goods and services acquired for personal use by persons whose primary purpose of travel is for business. Examples include the expenditure of carrier crews stopping off or laying over; government employees on official travel; employees of international organizations on official business; employees traveling on behalf of their employer (except for diplomatic staff, etc., employed in government enclaves, whose expenditure in their territory of physical location is included in government goods and services n.i.e., as discussed in paragraph 11.178); self-employed nonresidents traveling for business purposes; and seasonal, border, and other short-term workers who are not resident in the economy in which they are employed. The business activities may include production or installation work, sales campaigns, market exploration, commercial negotiations, missions, conferences, conventions, other meetings, or other business purposes on behalf of an enterprise resident in another economy.*

11.92 Business travel includes the goods and services acquired for personal use by persons whose main purpose of travel is for business (including goods and services for which business travelers are reimbursed by employers) but not the sales or purchases that they may conclude on behalf of the enterprises they represent.

11.93 A supplementary item may be provided to show the total credits and debits for acquisition of goods and services by border, seasonal, and other short-term workers.

Personal travel

11.94 *Personal travel covers goods and services acquired by persons going abroad for purposes other than business, such as vacations, shopping, participation in recreational and cultural activities, visits with friends and relatives, pilgrimage, and education- and health-related purposes.* Where important, there may be supplementary items to break down personal travel into subcomponents:

- (a) health-related travel (e.g., medical services, other health care, food, accommodation, local transport, acquired by those traveling for medical reasons). The scope of “medical reasons” for health-related travel is consistent with “health and medical care” from the *International Recommendations for Tourism Statistics 2008 (IRTS 2008)*. Health and medical care cover services received from hospitals, clinics, convalescent homes, health and social institutions, thalassotherapy, health and spa resorts, other specialized places to receive medical treatments based on medical advice, as well as cosmetic surgeries using medical facilities and services (see paragraph 3.17, *IRTS 2008*).
- (b) education-related travel (e.g., tuition, food, accommodation, local transport, health services, acquired by nonresident students); and
- (c) all other personal travel. This component includes health expenditure by those not traveling for health or educational purposes. In addition, travel expenses of companions of patients, education-related travelers, and those traveling on short-

term work or other business are included in this component, treating companions as normal travelers.

The residence of international patients and students is discussed in paragraphs 4.120–4.121. Health and educational services not included in travel are discussed in paragraph 10.167.

Other issues related to travel

11.95 A separate supplementary breakdown of travel may be provided according to product group, namely:

- (a) goods,
- (b) local transport services,
- (c) accommodation services,
- (d) food-serving services, and
- (e) other services.

Of which:

- Health services
- Education services
- Personal, cultural, and recreational services



This breakdown allows for closer links with tourism satellite accounts as well as supply and use tables. Further information on tourism statistics is presented in United Nations, *Tourism Satellite Account: Recommended Methodological Framework 2008*¹¹ and United Nations World Tourism Organization, *International*

¹¹The tourism satellite account has the concept of usual environment as an additional criterion to that of residence. As a result, acquisitions of goods and services by border, seasonal, and other short-term cross-border workers in their economy of employment can be identified separately in travel for compatibility with tourism statistics.

Recommendations for Tourism Statistics 2008. To highlight the link between travel and passenger transport services and tourism statistics, an approximation to tourism expenditure may be shown as a supplementary item that identifies relevant tourism-related goods and services in the travel and passenger transport items.¹²

11.96 Travel covers stays of any length provided there is no change of residence. (Principles for determining residence of households are shown in paragraphs 4.116–4.130.) In some cases, it may be useful to break down travel by length of stay. For example, expenditure of those who do not remain overnight may be shown on a supplementary basis if this is significant.

11.97 In line with the accrual principle, goods and services acquired during the visit but paid for earlier or later are included in travel. Goods and services may be acquired by being paid for by the person going abroad, paid for on his or her behalf, or provided without a quid pro quo (e.g., free room and board received, in such case there is also a corresponding transfer), or produced on own account (as in some cases of notional units for ownership of real estate and time-share accommodation).

¹²This supplementary item includes all personal travel and that part of business travel that does not cover expenditure of border, seasonal, and other short-term workers, as well as passenger transport services.

| Table 11.3. Treatment of Alternative Time-Share Arrangements | | | | |
|---|--|---|---|---|
| Type of arrangement | Classification | Up-front payment | Transaction in Asset | Periodic Flow |
| Deeded ownership | Ownership of land and buildings | Direct investment in notional unit in economy where the time share is located | Equity of the time-share holder (direct investment) | Accommodation services in travel (imputed based on equivalent market prices) and investment income (income on equity) |
| Right to use | Transferable right to use (amounts to economic asset) | Prepayment of accommodation | Trade credit and advances | Accommodation services in travel |
| | | + Contracts, leases, and licenses (only recognized when resold, difference between selling price and value of prepaid accommodation services, recorded in capital account) | + Nonproduced nonfinancial asset (capital account) | |
| Membership system | Membership is non-transferable right to use (does not amount to asset) | Prepayment of accommodation | Trade credit and advances | Accommodation services in travel |

11.98 Travel services may be arranged through a travel agent, tour operator, time-share exchange agent, or other channels, such as a nonfinancial digital intermediation platform. In some of these cases, the agent may pay the travel

providers an amount that deducts a margin or commission. If the agent is a resident of the same economy as the customer, then the margin or commission is a resident-to-resident transaction, and the net amount payable to service providers resident in other economies (after the margin or commission receivable by the agent is deducted) is included in travel (Box 11.2 explains the recording of balance of payments transactions associated with package tours). In other cases, the nonresident provider of the services may pay the resident agent's commission and the gross amount is payable by the customer to nonresidents, and thus is included in travel. Fares for cruises provided by operators resident in economies other than that of the passenger are included in travel (not passenger transport).

11.99 In the case of a nonresident owner of land and buildings, any accommodation services provided by the identified notional unit to its owner (see [paragraph 4.36](#)) are shown in travel.

11.100 The term “time-share” covers a wide range of arrangements. They can be classified in the three categories, as described in Table 10.3:

- (a) The acquisition of deeded ownership, or a similar arrangement, is equivalent to the acquisition of a notional direct investment enterprise. In this case, after deeded ownership is acquired, accommodation services provided to the owner should be imputed based on market prices, which in turn gives rise to direct investment income on equity. (An example of a similar arrangement is a long-term lease that is of such duration that it represents an effective change in ownership.)
- (b) Payments for rights to use a property under a membership system time-sharing arrangement, where the right to use the time share is not transferable (the third category shown in the table), is equivalent to prepaying for accommodation

services (recorded in trade credit and advances). After initial acquisition, the prepayment is drawn down, and imputed accommodation services should be recorded in travel.

- (c) A “right to use” time-share arrangement that carries a transferable right should be accounted for as prepaying for accommodation services (recorded in trade credit and advances), identical to the recording of a membership system time-sharing arrangement discussed above. However, if the right is resold, the difference between the selling price and the amount remaining in trade credit and advances (reflecting the value of the remaining prepaid accommodation services) should be recorded as a transaction in a nonproduced nonfinancial asset, in the capital account.

BOX 11.2 Recording of Package Tours

Tour operators (TOs) are businesses that combine two or more travel related services (for example, transport, accommodation, meals, entertainment, sightseeing) and sell them through travel agencies or directly to final consumers as a single product called a package tour for a single price. The components of a package tour might be pre-established or can result from an “à la carte” procedure where the visitor chooses a combination of services from a pre-established list.

This *Manual* recommends that a package tour should not be treated as a new product. The relevant economic interactions should be unbundled in order to record the transactions by different services providers that can be residents or nonresidents, and that contribute to the package tour separately: a) the services themselves (for example, transport, accommodation); b) the services provided by the tour operator; and c) the margin of the travel agency (usually different from the tour operator) selling the tour. The services arranged by the tour operator (transportation, accommodation, etc.) are not consumed by it when producing the tour package. These services are in fact consumed and recorded in the external

accounts¹³ by the traveler weeks or months after the tour was booked and payments were made to the tour operator.¹⁴ The margin of the travel agency is included under trade-related services as is the case with the services of the tour operator,¹⁵ whereas transportation is included under passenger transport and accommodation (e.g., hotels, guesthouses) under travel, provided the relevant transactions are between residents and non-residents.

To support the calculation of price statistics, countries may record travel packages as a separate supplementary item in *BPM7*.

The following numerical examples explain the recording of travel packages under two typical scenarios.

Example 1:

A tourist resident in country A wants to visit country C and buys a package tour from a travel agent, resident in country A, for 1000. The travel agent charges 50 as intermediation fee (margin or commission). The travel agent intermediates the procurement of the package tour from a tour operator (TO), also resident in country A, for 950. The TO charges 100 for his intermediation service. The TO buys transport for 300 from an enterprise resident in country A and accommodation for 550 from an enterprise resident in country C.

The following recording is recommended in the balance of payments of Country A. For completeness, the recording of domestic transactions in national accounts is also included.

¹³ *BPM7* paragraph 3.47 states: “Transactions in services are recorded when the services are provided...”

¹⁴ For more details, see the World Tourism Organization (WTO) paper of 2004, “*Clarifying the Treatment of Travel Agency, Tour Operator, Travel Agency Services, and Package Tours in SNA, Balance of Payments, and TSA and their Mutual Relationship*”.

¹⁵ Services of TO are treated as trade-related as their output mainly comes from intermediation fee/commissions. They may also earn from advertising/sponsorships, ancillary services such as visa/passport services, etc.

| Transactions | Balance of Payments Services Account | | Domestic Transactions (not recorded in BOP) |
|--|---|-------------------|--|
| | Credit/revenue | Debit/expenditure | |
| Tourist → Travel agent (Country A) | - | - | 50 |
| Tourist → Tour operator (Country A) | - | - | 100 |
| Tourist → Airline (Country A) | - | - | 300 |
| Tourist → Hotel (Country C) | - | 550 | - |

Example 2:

A tourist resident in country A wants to visit country C and buys a package tour from a travel agent, resident in country A, for 1000. The travel agent charges 50 as intermediation fee (margins or commission). The travel agent intermediates in the procurement of the package tour from a tour operator, resident in country B, for 950. The TO charges 100 for his intermediation service. The TO buys transport for 300 from an enterprise resident in country B and accommodation for 550 from an enterprise resident in country C.

The following recording is recommended in the balance of payments of Country A. For completeness, the recording of domestic transactions in national accounts is also included.

| Transactions | Balance of Payments Services Account | Domestic Transactions |
|--------------|---|--------------------------|
|--------------|---|--------------------------|

| | Credit/revenue | Debit/expenditure | (not recorded in BOP) |
|-------------------------------------|----------------|-------------------|-----------------------|
| Tourist → Travel agent (Country A) | - | - | 50 |
| Tourist → Tour operator (Country B) | - | 100 | - |
| Tourist → Airline (Country B) | - | 300 | - |
| Tourist → Hotel (Country C) | - | 550 | - |

e. Construction

11.101 Construction covers the creation, renovation, repair, or extension of fixed assets in the form of buildings, land improvements of an engineering nature, and other such engineering constructions as roads, bridges, dams, and so forth. It also includes related installation and assembly work. It includes site preparation and general construction as well as specialized services such as painting, plumbing, and demolition. It also includes management of construction projects.

11.102 Acquisition of goods and services by the enterprises undertaking that construction work from the economy of location of the construction work is also recorded under construction. Goods and services provided from the home economy of the construction enterprise are resident-to-resident transactions, and

so should be excluded (see also **paragraph 10.22 (d)**).¹⁶ Goods and services acquired from third economies (i.e., neither the residence of the enterprise, nor the location of the construction work) are recorded under the appropriate general merchandise or service item for the economy of the enterprise.

11.103 If the external operations of a construction enterprise are substantial enough, they constitute a branch resident in the economy of operations (see **paragraphs 4.27–4.29**). Therefore, a large-scale construction project contracted by a nonresident enterprise that takes a year or more to complete will usually give rise to a resident branch. Accordingly, there would be a direct investment relationship between the parent and the branch; there may also be goods and services supplied between the branch and the parent, such as for materials. As a result of this treatment, the construction contracts covered in international trade in services are generally of a short-term nature.

11.104 Construction can be disaggregated into construction abroad and construction in the compiling economy. This disaggregation allows for the recording on a gross basis of both the construction work undertaken and the goods and services acquired from the economy in which the construction activity is being undertaken by the nonresident enterprise that undertakes the construction.*Construction abroad*

11.105 Construction abroad (less than one year) consists of:

(a) construction work for nonresidents by enterprises resident in the compiling economy (credit), and

¹⁶ This treatment is applicable if the construction work doesn't give rise to a resident branch, as explained in paragraph 11.103.

- (b) the goods and services acquired from the economy in which the construction activity is being undertaken by these enterprises (debit).

Construction in the compiling economy

11.106 Construction in the compiling economy (less than one year) consists of

- (a) construction work for residents of the compiling economy by nonresident construction enterprises (debit), and
- (b) the goods and services acquired in the compiling economy from resident enterprises by these nonresident construction enterprises (credit).

Valuation

11.107 Construction is valued on a gross basis—that is, inclusive of all goods and services provided by the construction contractor as inputs to the work, and also inclusive of other costs of production and the operating surplus that accrues to the construction contractor. The transfer of ownership of construction under a contract may be deemed to occur in stages as value is put in place. In such cases, stage payments made by the owner can often be used to approximate the value of the partially completed assets¹⁷ although stage payments may sometimes be made in advance or in arrears of the completion of the stage, in which case advances or trade credit are also extended. Construction can be undertaken in a similar way to manufacturing services on physical inputs owned by others. That is, a customer may

¹⁷ 2025 SNA recommends recording the acquisitions of partially completed products as work-in-progress in the accounts of the final owner until the completion of the fixed asset. If the effective transfer of ownership cannot be determined in practice, stage payments could be used as a proxy for the transfer of ownership (see paragraphs 11.61-63, 2025 SNA for additional details).

provide goods and services as inputs to a construction project but the goods and services do not change ownership to the construction contractor. In such cases, the treatment, as with manufacturing services, is to record actual changes of ownership, not physical movements of goods. Repairs on embassies, bases, and so forth owned by the government that occupies them are included in government goods and services n.i.e. (see **paragraph 11.177**).

Existing buildings

11.108 As noted in paragraph 4.34, because of the imputation of notional units for ownership of land, most transactions involving acquisitions of existing buildings and land are treated as being between two resident units. International transactions of construction can arise when a building for an embassy, consulate, military base, or international organization changes hands with a resident of the economy in which the building is physically located. The ownership could change because of a sale or gift. Transactions in construction may also occur for buildings in an area that is exchanged between economies (see paragraph 4.9). The change in ownership of the land component is shown in the capital account (see paragraph 13.10); separate estimates should be made for the structure and land components. Transactions in existing buildings are included in construction in the same way as new buildings, to avoid having to distinguish new and existing buildings, and this treatment is analogous to the treatment in merchandise trade where both new and second-hand equipment are combined.

Other issues related to construction

11.108-1 A separate supplementary breakdown of construction may be provided for (a) constructions and (b) construction services along the lines of the CPC divisions 53 and 54. Constructions cover the physical outputs of construction

activities (e.g., buildings and civil engineering works such as highways, bridges, etc. provided in less than a year) and construction services cover the services provided in constructing the physical output

Construction abroad

Of which:

Constructions

Construction services

Construction in the compiling economy

Of which:

Constructions

Construction services

f. Insurance and pension services

11.109 Insurance and pension services include services of providing life insurance and annuities, freight insurance and other nonlife insurance, reinsurance, , pensions, standardized guarantees, and auxiliary services to insurance, pension schemes, and standardized guarantee schemes. More information on insurance and pensions is provided in Annex 8.

11.110 The processes undertaken by insurers and pension funds include charging premiums, paying claims, and investing funds. To analyze the underlying economic nature of these operations, it is necessary to rearrange these processes to identify separately the service element. Annex 8 provides some background to the way insurance and pension schemes operate and the value of their services is

calculated. The usual starting point for deriving the exported and imported components is the value of premiums and claims, which are observable, rather than derived.

11.111 In overview, the total value of insurance and pension services is derived as the margin between the amounts accruing to the companies (namely, premiums, contributions, and supplements) and the amounts accruing to the policyholders (namely, claims and benefits). That is, for nonlife insurance, the value of output of nonlife insurance services can be expressed with the following formula:

$$\begin{aligned} & \text{Actual premiums earned;} \\ + & \text{ Premium supplements;} \\ - & \text{ Claims payable plus adjustment for claims volatility, if necessary.} \end{aligned}$$

More elaboration is provided in Annex 6c: nonlife insurance (paragraphs A8.16–A8.22), reinsurance (paragraph A8.23), life insurance (paragraph A8.31), and pension schemes (paragraph A8.40).

11.112 The supplementary breakdown of insurance and pension services is between direct insurance (life and nonlife), reinsurance, auxiliary insurance services, and pension and standardized guarantee services. In addition, data on actual premiums earned (see paragraph A8.17) and unadjusted claims (claims payable before adjustments for claims volatility; see paragraphs A8.21–A8.22) may be provided as supplementary items, with separate details on nonlife, life, pension, and standardized guarantee components, as considered appropriate.

11.113 For exports of nonlife insurance services, the service charge can be estimated from total nonlife insurance output by multiplying the actual premiums earned from nonresidents by the ratio of service charge to actual premiums earned

for all nonlife insurance operations. (This calculation is illustrated in **Box 11.4, Example 2.**) The same prorating technique can be used for life insurance (including annuities), pension funds, and standardized guarantees. To the extent that these ratios vary for different lines of business (reinsurance, marine, term life, etc.), the calculations should be made separately. Similarly, if it is known that there are different margins between resident and nonresident customers, data from the operations most relevant to nonresident policyholders should be used. The ratios should be calculated according to the formula for output in paragraph 10.111, so they take into account premium supplements and claims volatility. (See **Box 11.2** for an example of calculations.)

11.114 For imports of nonlife insurance services, the available information is less complete than that for exports. For reinsurance, the only customers are insurance companies, so data on premiums payable and claims receivable may be readily available from them. However, premium supplements are not observable. For direct insurance, there is a wider range of customers and, so, available data may be more limited, such as premiums paid and actual claims only. To derive a service charge from these values, ratios need to be obtained using the most suitable available indicator:

- (a) Ratios from other economies or from published accounts of large international insurance companies may be used. International trade in some types of nonlife insurance is dominated by relatively large, specialized companies;

Box 11.2. Numerical Examples of the Calculation of Nonlife Insurance Services

(This example is applicable to types of insurance not subject to fluctuations in claims; for an example with an adjustment for claims volatility, see Annex 8.)

Example 1. For resident insurers with separate data on policyholders abroad:

| | |
|--|-----------------------------|
| Premiums earned from abroad | 100 (premiums received 105) |
| Claims payable abroad | 95 (claims paid 85) |
| Technical reserves relating to insurance with nonresidents | 200 (beginning of period) |
| Income attributable to policyholders | 20 (premium supplements) |

The resulting entries are:

| | |
|-----------------------------------|---|
| Services | Insurance service charge = 25 (derived as $100 + 20 - 95$) |
| Primary Income | Income attributable to policyholders = 20 |
| Current transfers | Premiums less service charges receivable = 95 (premiums plus supplements less service = $100 + 20 - 25$) Claims payable = 95 (actual; equal to premiums less service charges receivable if no adjustment of claims for volatility) |
| Financial account | Increase in insurance technical reserves = 15 (for prepaid premiums 105-100; for unpaid claims $95 - 85$) |
| International investment position | Insurance technical reserves 215 (end of period) |

Example 2. For resident insurers with separate data on policyholders abroad for premiums only:

| | |
|---|---------------------|
| Total insurance services (to residents and nonresidents) combined | 50 |
| Total premiums | 200 |
| Of which: Premiums from residents | 120 |
| Premiums from nonresidents | 80 |
| Estimated insurance services provided to nonresidents | 20 |
| | (= 80 / (200) * 50) |

Example 3. For nonresident insurers with resident policyholders:

| | |
|---|------------------|
| Premiums from residents | 40 |
| Ratio of service charge to premiums (average from data on insurers abroad) = 25 percent | |
| Estimated insurance services from nonresidents | 10 (= 40 * 0.25) |

- (b) Ratios from the resident insurance industry may be considered. In some economies, there may be equivalent lines of business; or
- (c) Ratios based on premiums payable abroad and claims receivable from abroad over a medium- to long-term period. International insurance trade includes direct insurance of large items (like ships and aircraft) and reinsurance, so claims receivable for a particular economy may be highly volatile. An adjustment for

premium supplements would also be needed, or there could be an understatement of the value of services.

Such ratios should be calculated as consistently as possible with those for total services and exports outlined above, so they would also take into account premium supplements and claim volatility. Although premium supplements are not readily observable for imports, some adjustment is needed, or there would be an understatement of the value of services and asymmetry with exports. Premium supplements to premiums ratios observed from other cases could be used to avoid this understatement. The same prorating techniques can be used for life insurance, annuities, pension funds, and standardized guarantee.

11.115 Data on reinsurance imports can be collected from the policyholders, because they are all insurance companies. The value of direct insurance service produced relates to the whole of the risk that is insured, including any reinsured component. Thus, direct premiums and claims are recorded gross of reinsurance.

11.116 Freight insurance is a form of nonlife insurance that raises particular issues. Freight insurance premiums payable on international traded goods before they reach the customs frontier of the economy of the exporter are included in the FOB price of the good. Freight insurance premiums payable subsequent to the goods leaving the customs frontier of the exporter's economy are treated as payable by the importer. When the parties have not arranged the payment of insurance premiums in the same way as this methodology, partitioning and rerouting are needed (see paragraphs 3.16–3.17). These adjustments are of the same nature as those discussed for freight services. The service elements for freight insurance can be derived in the same way as other insurance.

11.117 Auxiliary insurance services consist of the provision of services that are closely related to insurance and pension fund operations. Included are agents' commissions, insurance brokering and agency services, insurance and pension consultancy services, evaluation and loss adjustment services, actuarial services, salvage administration services, and regulatory and monitoring services on indemnities and recovery services. These services are charged through explicit charges.

In order to avoid overstating insurance services, a ratio can be used to estimate services from the reported insurance premiums recorded in the transfer income account. The ratio may be derived from the domestic nonlife insurance industry and applied to premiums paid.

11.117-1 Islamic insurance (Takaful) and re-insurance (Re-takaful) are discussed in Chapter 17, Islamic Finance. While these insurance schemes have some similarities with the conventional insurance presented in this section, there are notable differences in the business arrangements as explained in Chapter 17. Insurance services provided through fintech (commonly known as InsurTech) should be covered under respective insurance services categories.

g. Financial services

11.118 Financial services cover financial intermediary and auxiliary services, except insurance and pension fund services. These services include those usually provided by banks and other financial corporations. They include deposit taking and lending, letters of credit, credit card services, commissions and charges related to financial leasing, factoring, underwriting, and clearing of payments. Also included are financial advisory services, custody of financial assets, crypto assets or bullion, financial asset management, monitoring services, liquidity provision services, risk

assumption services other than insurance, services of foreign exchange bureaus and money transfer operators, merger and acquisition services, credit rating services, stock and crypto exchange services, and trust services. Financial services enabled by Fintech¹⁸ including those facilitated by financial digital platforms such as payment services, peer-to-peer lending services, crowd funding platform services, and other financial services such as capital raising/investment management are included under this category without introducing new services categories. Nevertheless, if a country has a strong need to identify the financial services provided through fintech, introducing an “of which” category may be considered. See Section E, Chapter 16 for the discussion on digitalization and financial system.

11.119 Financial services may be charged for by:

- (a) explicit charges;
- (b) margins on buying and selling transactions;
- (c) asset management costs deducted from property income receivable in the case of asset-holding entities; or
- (d) margins between interest payable and the reference rate on loans and deposits (called implicit financial services on loans and deposits).

For financial intermediaries, the balance between explicit and implicit charges may vary over time and from institution to institution, so data on both are needed to get a complete picture of their supply of services.

¹⁸ See paragraph 4.154 for the definition of fintech.

Explicit charges

11.120 Services are charged for by explicit charges in the case of many financial services and require no special calculation. Some explicit charges associated with deposit and lending services include application and commitment fees, fees for one-off guarantees, early or late repayment fees or penalties, and account charges. (However, an increase in interest rates as a result of late payment would not be classified as an explicit fee, but would be included with other interest and, so, taken into account as implicit financial services on loans and deposits.)

11.121 Explicit charges also include commissions and other fees related to letters of credit, bankers' acceptances, lines of credit, financial leasing, money transfer, foreign exchange transactions, fees related to financial digital platforms that intermediate funding or payment transactions (see paragraphs 16.xx-xx), fees associated with credit cards¹⁹ and factoring (see paragraph 11.121-1). Also included are commissions and other charges related to transactions in securities: brokerage, placements of issues, underwritings, and redemptions; commissions and fees paid for the arrangement of financial derivative contracts; commissions of commodity futures traders; and asset management services, financial market operational and regulatory services, security custody services, and so forth.²⁰ Service charges on purchases of IMF resources are included among an economy's financial service payments, as are charges (similar to commitment fees) associated with undrawn

¹⁹ For example, fees charged by credit cards on the purchase of goods and services, in certain cross-border transactions. The charge is usually calculated as a percentage of the sale. In addition, foreign transaction fees and cash advance fees on the use of credit cards in cross-border transactions are included under explicit charges.

²⁰ Financial derivative transactions may take place directly between two parties or through intermediaries. In the latter case, there may be implicit or explicit service charges. It is not usually possible to distinguish implicit service charges. Therefore, it is recommended that net settlement payments of derivative contracts be recorded as financial transactions. However, when possible, service charge components should be recorded separately.

balances under stand-by or extended arrangements with the IMF (see paragraphs A9.xx).²¹ Charges payable to a financial institution for arranging the provision of financial resources, which are services, should be distinguished from amounts payable to the suppliers of financial resources for the use of these resources (which are income; see **paragraph 12.3(b)**).

11.121-1 Factoring is a transaction in which a financial company (factor, which can be a bank, a specialized factoring company, or other financial organization) buys trade accounts receivable from a supplier at a discount (see paragraph 5.xx for additional details on factoring). The discount is equal to the difference between the nominal value of the accounts receivable and the actual payments by the factor to the supplier, and may consist of three elements: (i) fees; (ii) interest; and (iii) compensation for possible credit defaults. From a conceptual perspective, the service provided by the factor (i.e., output of the factor) is represented by the first element only. For additional details on factoring refer to paragraph 7.xx, 2025 SNA.

Margins on buying and selling transactions

11.122 Dealers or market-makers in financial instruments may charge, in full or part, for their services by having a spread between their buying and selling prices. Dealers, market-makers, foreign exchange bureaus, and other intermediaries

²¹ The International Monetary Fund (IMF) imposes several types of charges and fees on the use of its financial resources. These charges are designed to cover the IMF's operating costs and to ensure that borrowing countries have an incentive to repay their loans promptly. Service charge on purchases of IMF resources is a one-time charge of 0.5 percent on each drawing (disbursement) from the IMF's General Resources Account (GRA). This fee is assessed at the time of the disbursement. Commitment fee is charged on the undrawn portion of the credit line for Stand-By Arrangements (SBA), Extended Fund Facility (EFF), and other similar arrangements. The fee is refundable if the member draws on the committed resources.

producing this kind of service are distinguished from other traders by the existence of a buy-sell spread, which shows that they serve the market in a somewhat similar way to a wholesaler, by providing liquidity and inventory. Foreign exchange, shares, bonds, notes, financial derivatives, and other financial instruments are often bought and sold in this way.

11.123 The dealers' service charges are included indistinguishably in the financial transactions to which they relate. In such cases, the difference between the reference price and the dealer's buying price at the time of purchase represents the service charge to the seller. Similarly, the difference between the reference price and the dealer's selling price at the time of sale represents the value of the service provided to the buyer. The reference price is usually a mid-price between the buying and selling prices; some dealers may have their own internal price for determining their buying and selling prices. In contrast to the reference price, the prices actually paid or received include the financial service component. By using the reference price at the time of purchase or sale, any holding gains or losses on the dealer's trading activity are excluded from services. The service can also be measured by applying the dealers' average margin as a percentage to the value of transactions through dealers.



11.123-1 In practice, margins can be very difficult to accurately compile. This is usually due to the fact that (a) not all instruments are traded in a way that generates margins;²² (b) not all transactions by dealers generate margins; (c) bid-ask spreads may be very different for each transaction; and (d) the geographical and sector allocation of this service is complex to accurately determine.

²² Trading in equities often do not generate margins. Equities can be purchased either in primary or secondary markets. In both cases, margins are typically not generated as only explicit fees are charged during the transactions. There are, however, secondary market situations in which trading in equities can generate margins.

Asset management costs deducted from property income

11.124 Some institutional units have the sole or predominant function of holding financial assets on behalf of their owners. For example, some mutual funds, holding companies, trusts, and special purpose entities serve this purpose. In the process of managing those assets, these enterprises incur administrative expenses, such as payments to fund managers, custodians, banks, accountants, lawyers, or their own staff. The expenses can be charged for explicitly as a fee, or implicitly by being paid out of investment income received or out of the assets of the enterprise. The expenses implicitly paid for should be recognized as a service to the owners. For example, a hedge fund may distribute a proportion of the net income of the fund to the entity that manages the fund, which should be recorded as a charge for services. Similarly, a custodian may charge lower fees in exchange for the right to on-lend securities (the income from on-lending securities is discussed in paragraphs 12.67–12.68).

11.125 Implicit asset management service charges can be measured at cost. The corresponding entry is to increase the net value of investment income payable to the investor to the gross value before deduction of the expenses. Without the recognition of the output of such services, the costs incurred would lead to negative operating surplus for the asset management enterprises. With this treatment, these enterprises have a net operating surplus of zero.

11.125-1 Institutional units may be set up for holding and managing assets on behalf of others. They may have employees of their own, but more often engage the services of administrators, trustees and/or portfolio managers to manage the operations of the funds. This is the case for most investment funds. Importantly, the

funds themselves are treated as separate institutional units, distinct from the unit managing them. The investment funds pay fees to these service providers and make use of the required human resources to support the funds operations (buying and selling of securities, providing legal, accounting, and other services required to ensure that the fund is operating efficiently). The fund in turn charges a service fee to investors which is equivalent to the amount of operating expenses and is usually reported as an annual percentage of the assets in the fund. In addition, holders of investment fund shares/units may be charged with fees on specific transactions, such as redemption fees, exchange fees imposed for transferring shares/units within the same fund group or account fees. Both types of fees are treated as payments for services that are provided directly from the original professional providers to the shareholders. Investment funds are thus not treated as providers or consumers of services, and their output and intermediate consumption is equal to zero.

Implicit financial services on loans and deposits

11.126 Actual interest on deposits and loans can be seen as including both an income element and a charge for a service. Lenders and deposit-takers operate by offering rates of interest to their depositors that are lower than the rates that they charge to their borrowers. The resulting interest margins, which are termed implicit financial services on loans and deposits, are used by the financial corporations to defray their expenses and to provide an operating surplus. Interest margins are an alternative to charging customers explicitly for financial services. In addition to financial intermediation, where funds are taken in as deposits and loaned, lending of own funds can give rise to implicit financial services on loans in the cases of money lenders and loans made from banks' own funds.

11.127 By convention, these implicit charges in respect of interest apply only to loans and deposits and only when those loans and deposits are provided by, or deposited with, financial corporations (as defined in [paragraph 4.63](#)). While loans by holding companies, special purpose entities, and other captive financial institutions to their affiliates are not normally expected to generate implicit financial services, they may do so if they charge a margin. Financial corporations may generate implicit financial services even if they have only loans or only deposits; for instance, a credit card issuer that raises all of its funds by debt securities can earn implicit financial services on its loans to credit card customers.

11.128 The rate of implicit financial services on loans and deposits may vary owing to a range of factors, such as the accessibility of funds, services included such as arrangements for check-writing facilities (for deposits), perceptions of the credit risk of the borrower, and the collateral provided (for loans). Additionally, large-scale (“wholesale”) loans and deposits tend to have lower rates of implicit financial services than small-scale (“retail”) loans and deposits.

11.129 Implicit financial services on loans and deposits payable by each of the depositors and borrowers are calculated by using the concept of a “reference” rate of interest. The reference rate to be used in the calculation of actual interest is a rate between bank interest rates on deposits and loans. However, because there is no necessary equality between the level of loans and deposits, it cannot be calculated as a simple average of the rates on loans or deposits. As liquidity transformation services are considered to be part of the implicit financial services on loans and deposits, it is recommended to use a single temporal reference rate, and not two reference rates distinguishing short-term and long-term loans and deposits. The calculation of the single reference rate should be determined according to domestic circumstances, using any of the following approaches: The reference rate

should contain no service element and reflect the risk and maturity structure of deposits and loans.. The reference rate will change over time with market conditions

- a reference rate based on a single observable exogenous rate for a specific instrument, such as interbank lending rates;
- a reference rate based on a weighted average of observable exogenous rates of maturities with different terms (weighted by the stock of loans and deposits in each maturity); or
- a weighted average of the endogenous interest rates on loans and deposits.

11.129-1 As noted before, liquidity transformation is considered to be part of implicit financial services on loans and deposits. Less clarity exists around the inclusion or exclusion of credit default risk. While there is conceptual merit in excluding credit default risk from implicit financial services on loans and deposits, at present many countries are not in a position to do this in a way that ensures reasonable comparability across most countries. Having said that, a number of countries have demonstrated that it is feasible, in their cases, to produce meaningful results and these countries have compiled estimates of implicit financial services on loans and deposits on this basis. Recognizing that these improvements will take some time to materialize, it is recommended that in the interest of maintaining international comparability, those countries that exclude credit default risk from their estimates of implicit financial services on loans and deposits should also provide supplementary estimates that include credit default risk.

Box 11.5. Numerical Example of Calculation of Implicit Financial Services on Loans and Deposits

The data requirements for the calculation of implicit financial services on loans and deposits are:

- (1) values of loans and deposits (available from the IIP);
- (2) the corresponding interest payable/receivable (available from the earned income account); and
- (3) the applicable reference rate (usually available from central bank bulletins and other publications).

In this example, all loans and deposits are denominated in domestic currency and are issued by financial corporations. The interbank interest rate is 5 percent per annum.

Average value of loans during the year = 1000

Actual interest (known as bank interest in SNA) receivable by financial corporations on loans = 70 partitioned into:

50 pure interest (known as SNA interest in SNA) receivable (derived as 1000 at 5 percent)

20 implicit financial services receivable (derived as 70 – 50)

Average value of deposits during the year = 500

Actual interest payable by financial corporations on deposits = 10 partitioned into:

25 pure interest payable (derived as 500 at 5 percent)

15 implicit financial services receivable (derived as 25 – 10)

Total implicit financial services on loans and deposits receivable by financial corporations = 35 (20+15)

Notes:

The difference between interest receivable and payable is not the same as implicit financial services on loans and deposits. In this example, the difference is 25, which differs from the correct figure because the loan assets do not match the deposit liabilities. (For example, an economy which had external loan assets funded entirely from domestic sources, there would be zero interest payable, so the difference between external interest payable and receivable is an unsuitable estimate of implicit financial services on loans and deposits.) Unlike the reference rate concept, the method fails to separate the services provided to depositors from those to borrowers, so it does not provide a basis to identify the partner economy.

The average value of loans or deposits should be used in the calculation, as it corresponds to the amount on which interest accrues. If values change significantly during the period, the use of an end-of-period value as a proxy for the average may give an unsatisfactory result.

A more detailed calculation may take into account different currencies and maturities.



11.130 For cross-border deposits and loans, different currencies may be involved, so separate reference rates should be applied for each currency that is a significant proportion of loans or deposits. To be closest to the definition of the reference rate and for international symmetry of recording, the rate should be taken from the financial markets of the home market of the currency, and preferably be the same as used by statistical compilers in that economy. (The data compiled for the currency composition in **Tables I-III of Annex 14** can provide relevant information on calculation of implicit financial services on loans and deposits for each major currency.)

11.131 Implicit financial services on loans and deposits is calculated as follows:

- (a) for loans from financial corporations—the difference between the interest actually payable on loans and the amount that would be payable if the reference rate were used, and
- (b) for deposits with financial corporations—the difference between the interest that would be earned if a reference rate were used and the interest actually earned.

(See Box 11.5 for a numerical example.)

11.132 Because a repo with supply of cash is treated as involving a loan or deposit, as stated in paragraphs 5.52–5.53, it may give rise to implicit financial services on loans and deposits. Similarly, a financial lease is treated as giving rise to a loan (see paragraphs 5.56–5.58) so it may also give rise to implicit financial services on loans and deposits if provided by a financial corporation. Interbank loans and deposits generally occur at or close to the reference rate, in which case there is no implicit financial services on loans and deposits. However, where there are significant international interbank transactions at interest rates above the reference rate (e.g., if the debtor bank has a lower credit rating), it would be suitable for implicit financial services on loans and deposits to be identified. See also paragraphs 12.74–12.75 on the effects of implicit financial services on loans and deposits on interest.

11.133 Estimates of cross-border implicit financial services on loans and deposits can be calculated from data on the international investment position or banking data on deposits and loans from financial corporations in conjunction with the amounts of actual interest payable and receivable and reference interest rates.

For economies where cross-border implicit financial services on loans and deposits is small, it can be measured with relatively simplified methods based on aggregated data.

11.134 During periods of volatile movements in reference rates and when liquidity markets begin to malfunction, considerable care should be taken in determining estimates of implicit financial services on loans and deposits. These periods may be characterized by negative estimates of implicit financial services on loans and deposits, particularly for depositors, but also for borrowers. Negative implicit financial services on loans and deposits can also occur owing to measurement error. For example, some large international transactions between banks may be at or near the reference rate, so a small error in measuring the reference rate could cause negative implicit financial services on loans and deposits. This gives rise to interpretation problems, as it is not possible for output to be negative. Therefore, when such incidences occur, countries are encouraged to review the applicability of the underlying reference rate for that period to calculate the implicit financial services on loans and deposits. The first, and simplest approach, is that countries consider taking the simple weighted average of the interest rates on loans and deposits for those years with negative implicit service charges for either depositors or borrowers. The second, and slightly more complicated approach, takes the view that, during periods when markets are dis-functional, banks may offer financial inducements to attract depositors, meaning that part of what is now typically recorded as bank interest may actually consist of a transfer element. In this approach, during periods of negative implicit financial services on loans and deposits calculated using the conventional approach, the implicit service charges should instead be calculated by assuming that the margin

(implicit financial services as a per cent of deposits or loans) banks charge on deposits or loans is broadly stable over time.

11.134-1 Negative interest rates may cast doubts on the right reference rates to be used in the calculation of implicit financial services on deposits and loans (see paragraph 12.xx for the discussion on negative interest rates). Further, negative interest rates raise the risk of negative implicit financial services on deposits and loans as banks may offer interest rates higher than reference rates, to retain depositors. Therefore, compilers should review the reference rates to be used with a view to avoid negative implicit financial services, in coordination with the national accounts compilers.

11.135 The identification of implicit financial services on loans and deposits as the financial service implicitly included in interest requires corresponding adjustments to interest as recorded in the primary income account. Actual interest payable by borrowers is partitioned between a pure interest charge at the reference rate (in earned income) and implicit financial services on loans and deposits (a service). Similarly, pure interest receivable by depositors is calculated by applying the reference rate to depositors, and depositors are shown as consuming a service equivalent to the difference between the actual interest and interest at the reference rate. The interest shown in the primary income accounts is shown after adjusting for implicit financial services on loans and deposits—“pure interest”; also, there is a memorandum item for interest before adjusting for implicit financial services on loans and deposits—“actual interest” (see paragraphs 12.74–12.75).

11.136 Financial services in *BPM7* exclude pure interest, dividends, life insurance and pension services, other insurance services, nonfinancial advisory

services provided by banks (included under other business services), and holding gains and losses on purchases and sales of financial instruments.

h. Charges for the use of intellectual property n.i.e.

11.136-1 Intellectual Property Products are assets resulting from research, development, investigation, or innovation, leading to knowledge, or the creation of artificial intelligence systems that the developers can market or use to their own benefit in production because use of this knowledge or system is restricted by means of legal or other protection.


11.137 Charges for the use of intellectual property n.i.e. include:²³

(a) Charges for licenses to use proprietary rights from research and development (such as patents, copyrights, industrial processes and designs, and trade secrets) as well as from marketing (such as franchises, trademarks, and brand names); and

(b) Charges for licenses to reproduce or distribute (or both) intellectual property embodied in produced originals or prototypes (such as copyrights on books and manuscripts, computer software, data and databases, cinematographic works, and sound recordings) and related rights (such as for live performances and television, cable, or satellite broadcast).

(As shown in Table 11.4, transactions in some other kinds of intellectual property are included in other categories.)

²³ While charges for the use of intellectual property n.i.e. pertain primarily to intellectual property products, they also include charges for the proprietary rights to use of marketing assets (franchises, trademarks, and brand names).

 **11.138** The production of books, recordings, films, software, disks, and so forth is a two-stage process of which the first stage is the production of the original and the second stage the production and use of copies of the original. The output of the first stage is the original itself over which legal or de facto ownership can be established by copyright, patent, or secrecy. The owner of the asset may use it directly to produce copies that give the purchaser a license to use. Alternatively, the owner may issue a license to other producers to reproduce and distribute the content. The payments made by the licensee to the owner may be described in various ways, such as fees, commissions, or royalties. The treatment of flows relating to intellectual property is summarized in Table 11.4. In contrast to temporary rights to use (included under license to use and license to reproduce and/or distribute), outright sales of patents, copyrights, and industrial processes and designs are included under research and development services (discussed in paragraph 11.147). Similarly, temporary rights for computer software and audiovisual originals are treated differently from outright sales (as shown in Table 11.4).

11.139 The time of recording of charges for the use of intellectual property follows the substance of the license agreement. If the rights to use intellectual property are sold for a fixed fee, under a noncancellable contract, and where the licensor has no remaining obligations to perform, then the whole sum is a sale. Otherwise, charges are allocated over the life of the agreement. In practice, it may be feasible to record the payments only when they are made.

11.140 Franchise fees, trademark revenue, payments for use of brand names, and so forth include aspects of property income (i.e., putting a nonfinancial nonproduced asset at the disposal of another unit) as well as aspects of services (such as the active processes of technical support, product research, marketing, and quality

control). In principle, it would be desirable to separate the income and service elements. However, it may not generally be feasible to do so in practice; in which case, a convention is adopted that the entire values are to be classified as charges for the use of intellectual property n.i.e.. Such a convention would be taken as a starting point, but if additional information to make a split is available, the compiler should do so. ***Other issues related to intellectual property***

11.140-2 In *BPM7*, no distinction is made in the treatment of licenses to use and licenses to reproduce based on whether they will be used in production for more than one year or less, and whether the licensee assumes risks and rewards of ownership.²⁵ The concept of the sale of part of the original also does not exist in *BPM7*. However, it is acknowledged that such a distinction helps in harmonizing the cross-border IPP related transactions with distinction between fixed capital formation/intermediate consumption in national accounts. Therefore, the [updated MSITS] will include additional details through Extended Balance of Payments Services Classification (EBOPS) for aligning trade in IPP related services items with fixed capital formation/intermediate consumption categories in national accounts.

²⁵ In the SNA (a) copies sold under license to use may be treated as fixed assets (i.e., produced assets that are used repeatedly or continuously in production for more than one year) if they will be used in production for more than one year and the licensee assumes all the risks and rewards of ownership; and (b) a license that allows the licensee to reproduce the original and subsequently assume responsibility for the distribution, support, and maintenance of these copies, should be regarded as the sale of part or whole of the original to the unit holding the license to reproduce (see paragraphs 11. xx-xx, 2025 SNA).

| Table 11.4. Treatment of Intellectual Property | | | |
|---|---|---|--|
| | | Use of intellectual property | Sale/purchase of ownership rights ³ |
| Franchises and trademarks | | charges for the use of intellectual property n.i.e. | capital account entry |
| Outcomes of research and development | | Charges for the use of intellectual property n.i.e. | research and development services |
| Computer services; Information services; Audiovisual and related services: | License to use excluding reproduction and distribution¹ | License to reproduce and/or distribute² | relevant service item ⁴ |
| (a) Customized all types | relevant service item ⁴ | | |
| (b) Noncustomized—downloaded or otherwise electronically delivered | relevant service item ⁴ | | |
| (c) Noncustomized—provided on physical media with periodic license fee | relevant service item ⁴ | charges for the use of intellectual property n.i.e. | |
| (d) Noncustomized—provided on physical media with right to perpetual use | goods | | |
| <p>¹ Covers the case where a specific product is supplied with the right to use the intellectual property embodied in it, but not to copy it for further distribution. The transactions should be classified under the appropriate goods or services items. This includes cross-border transactions in NFTs that convey no ownership rights and only allow for personal use of a specified asset (first type of NFTs), which should be recorded under the relevant service category (computer services, audiovisual and related services, or information services) depending on the content of related asset.</p> <p>² Covers the case where authority to reproduce and/or distribute the intellectual property is delegated by its owner.</p> <p>³ Covers the case where there is a change of economic ownership of the whole of the intellectual property right in question. The seller no longer has any rights or obligations associated with the intellectual property. This case also includes second or subsequent outright sales of intellectual property rights as well as cross-border transactions in NFTs that convey full ownership rights (third type of NFTs). These should be recorded as computer services, audiovisual and related services, or information services, if the underlying asset is digital (see paragraph 16.xx-xx for additional details on NFTs).</p> | | | |

⁴ The relevant service item is either computer services (see paragraph 11.143), or audiovisual and related services (see paragraphs 11.162–11.166), or information services (see paragraph 11.146) depending on the nature of the content provided.

For example, the sale/purchase of a copy of a software package that is mass-produced, and is obtained by an individual to load onto a single computer is covered by a license to use that excludes reproduction and distribution; this situation would be recorded in goods or services depending on the examples (see examples (b), (c), and (d) under software in Table 11.4). If a manufacturer pays for the right to include the software on computers that it produces, then the payment would be a license to reproduce and/or distribute (charges for the use of intellectual property provided by the owner of the original).



i. Telecommunications services

11.142 Telecommunications services encompass the broadcast or transmission of sound, images, data, or other information by telephone, radio and television cable transmission, radio and television satellite, electronic mail, and so forth, including business network services, teleconferencing, and support services. They do not include the value of the information transported. Also included are mobile telecommunications services, Internet backbone services, and online access services, including provision of access to the Internet. Excluded are installation services for telephone network equipment (included in construction) and database services (included in information services).

j. Computer and information services

Computer services

11.143 Computer services consist of hardware- and software-related services and data-processing services. Table 11.4 shows the classification of various

arrangements for software and other types of intellectual property products.

Computer services include:

- (a) sales of customized software (however delivered) and related licenses to use;
- (b) the development, production, supply, and documentation of customized software, including operating systems, made to order for specific users;
- (c) noncustomized (mass-produced) software downloaded or otherwise electronically delivered, whether with a periodic license fee or a single payment;
- (d) licenses to use noncustomized (mass-produced) software provided on a physical storage device with a periodic license fee (noncustomized software on storage devices with licenses that convey perpetual use is included in goods; see paragraph 10.17(c) and Table 11.4);
- (e) sales and purchases of originals and ownership rights for software systems and applications;
- (f) hardware and software consultancy and implementation services, including the management of subcontracted computer services;
- (g) hardware and software installation, including installation of mainframes and central computing units;
- (h) maintenance and repairs of computers and peripheral equipment;
- (i) data recovery services; provision of advice and assistance on matters related to the management of computer resources;
- (j) analysis, design, and programming of systems ready to use (including web page development and design), and technical consultancy related to software;

- (k) systems maintenance and other support services, such as training provided as part of consultancy;
- (l) data-processing and hosting services, such as data entry, tabulation, and processing on a time-sharing basis;
- (m) web page hosting services (i.e., the provision of server space on the Internet to host clients' web pages);
- (n) provision of applications, hosting clients' applications, and computer facilities management;
- (o) artificial intelligence (AI)²⁷ systems such as virtual assistants, chatbots,²⁸ speech/image recognition, smart home devices;
- (p) software applications facilitating online meetings and video conferencing;
- (q) cloud computing services (i.e., computing, data storage, software, and related ICT services accessed remotely over a network, supplied on demand and with measured resource usage). See paragraphs 16.xx-xx for additional details;
- (r) validation of transactions relating to crypto assets (provided by miners/validators) including the provision of such services as part of a pool of miners or through cloud computing facilities. See Box 11.x for additional details.

²⁷ AI is classified as a special type of software even though AI systems frequently include data and hardware elements, because the system is controlled by software even when these elements are present. However, the equipment that contains an embedded AI system (or other embedded software) is still classified as goods (see Section B.3, Chapter 16 for additional details on AI).

²⁸ A software application designed to simulate human conversation and interact with users via text or voice, often powered by rules, artificial intelligence, and natural language processing to provide automated responses and perform tasks. Chatbots range from simplistic models that operate off scripts to provide quick responses to specific questions, to artificial intelligence (AI) and machine learning (ML) models that can converse with users and complete more complex tasks.

While the above categories are expected to be mutually exclusive, in practice, there could be overlaps between some of these categories.

11.144 Software includes general business productivity software, computer game software, and other applications. However, as shown in **Table 11.4** and paragraph **10.17(d)**, some forms of software are classified under goods. It may be analytically useful to be able to identify all software, whether in goods or services. The time of recording software services follows the same principles as for other intellectual property, identified in paragraph **11.139**.

11.144-1 Telecommunication services (section i) and computer services are defined in terms of the nature of the service, not the medium of delivery.²⁹ To illustrate, provision of accounting services is included under professional and management consulting services, even if these services are entirely delivered by telephone, computer, or the Internet. Only amounts payable for transmission should be included under telecommunications services; downloaded content should be included in the appropriate item (computer, information, audiovisual and related, etc., services).

²⁹However, the medium of delivery is taken into account in some cases in distinguishing between goods and services, as shown in Table 11.4.

Box 11.x. Validation of Crypto Asset Transactions

Validation of crypto asset transactions is a service. Crypto assets without a corresponding liability designed to act as a medium of exchange are considered as nonproduced nonfinancial assets and recorded within a separate category in the capital account (see paragraph 14.xx). The miners solving cryptographic puzzles for validating the transactions in these assets on the blockchain are producers of validation services.

Most mineable crypto assets without a corresponding liability come into circulation via the work of miners that solve cryptographic puzzles (proof-of-work) and validate transactions on the blockchain. Non-mineable crypto assets without a corresponding liability and crypto assets with a corresponding liability (e.g., stablecoins) may be released via an explicit sale and/or as payment to validators that validate transactions in different ways than via proof-of-work (e.g., via proof of stake).

The services of miners/validators should be measured as the sum of both explicit validation fees and implicit fees. The explicit fee in crypto assets is paid by the party initiating the transaction.

The implicit fee (newly released crypto assets/staking rewards) is assumed to be collectively consumed by the existing holders of units of that crypto asset (these concern multiple institutional units that may be spread across a wide range of countries), while those rewarded by the explicit fee are consumed by the transactor paying the fee.

The following example explains the recording of transactions associated with validation services. For additional guidance and examples refer to the [*Compilation Guidance on Crypto Assets.*]

An entity in Economy A is providing validation services of transactions in crypto assets without a corresponding liability for transactions originated in Economy B. The Economy B consumer pays a transaction fee of 10 in crypto assets. In addition, the Economy A entity receives 15 in crypto assets as implicit fee. The following entries are recorded in the balance of payments of Economy A.

Services account

Computer services (credits/revenues) = implicit fee (15) + explicit fee (10) = 25

Capital account

Acquisition/disposal of non-produced nonfinancial assets/Crypto assets without corresponding liabilities (debits/expenditures) = 25

11.145 Excluded from computer services are computer training courses not designed for a specific user (included in other personal, cultural, and recreational

services). Charges for licenses to reproduce or distribute software (or both) which are included in charges for the use of intellectual property n.i.e., are also excluded. Leasing of computers without an operator is included in operational leasing.

Information services

11.146 Information services include news agency services, such as the provision of news, photographs, and feature articles to the media. Information services also include outright sale of data and databases, and related services such as compilations of information content produced by accessing and observing phenomena, database conception, entering and maintaining data in databases, data storage, and the dissemination of data and databases (including directories and mailing lists), both online and through magnetic, optical, or printed media; web search portals (search engine services that find information for clients who input keyword queries) and services of chatbots that provide summarized information or translation for the questions of clients on a wide range of topics. Also included are direct nonbulk subscriptions to newspapers and periodicals, whether by mail, electronic transmission, or other means; other online content provision services; and library and archive services. (Bulk newspapers and periodicals are included under general merchandise.) Downloaded content that is not software (included in computer services) or audio and video (included in audiovisual and related services) is included in information services.

k. Research and development services

11.147 Research and development services consist of services that are associated with basic research, applied research, and experimental development of new products and processes. In principle, such activities in the natural sciences, engineering, technology, medical and health sciences, social sciences, humanities,

and interdisciplinary research and development services are covered,. Also included is commercial research related to electronics, pharmaceuticals, and biotechnology.

11.148 The definition of research and development services used here and in the CPC is largely aligned with the Frascati definition (which is used to define the scope of capital formation in the *2025 SNA*); it includes other product development that may give rise to patents. Outright sales of the results of research and development (such as represented in patents, copyrights, and sale of information about industrial processes) are included in research and development. However, amounts payable for use of proprietary rights arising from research and development are included under charges for the use of intellectual property n.i.e.; see paragraphs **11.137–11.140**.

I. Professional and management consulting services

11.149 Professional and management consulting services include:

- (a) legal services, accounting, management consulting, managerial services, and public relations services; and
- (b) advertising, market research, and public opinion polling services.

11.150 Services for the general management of a branch, subsidiary, or associate provided by a parent enterprise or other affiliated enterprise are included under professional and management consulting services. However, reimbursements of ancillary services supplied by affiliated enterprises, such as transport, purchasing, sales and marketing, or computing, should be shown under the relevant specific heading. Management fees are included in technical and other business services. However, disproportionately large values of services between affiliated enterprises

should be examined for signs that they are disguised dividends, such as large fluctuations that do not reflect actual changes in the services provided.

m. Trade-related services

11.150-1 Trade-related services cover fees related to nonfinancial intermediation services, such as commissions on goods and service transactions payable to merchants, commodity brokers, dealers, auctioneers, and commission agents. For example, these services include the auctioneer's fee or agent's commission on sales of ships, aircraft, and other goods. Fees paid to nonfinancial intermediation platforms, including digital intermediation platforms, are also recorded in trade-related services. Nonfinancial intermediation platforms, including digital intermediation platforms facilitate, for a fee, the direct interaction between multiple buyers and multiple sellers, without the platform taking economic ownership of the goods or rendering the services that are being sold (intermediated) (see paragraphs 16.xx-xx for further details on nonfinancial digital intermediation platforms). If the trader owns the goods being sold, the trader's margin is generally included indistinguishably in general merchandise FOB (if the goods pass through the economy of the trader) or under goods under merchanting (otherwise). However, any fees not included in the FOB price of the goods are included in trade-related services. Brokerage on financial instruments and fees related to financial digital platforms that intermediate funding or payment transactions are excluded from trade-related services (included in financial services).

n. Operating leasing services

11.153 *Operating leasing is the activity of renting out produced assets under arrangements that provide use of a tangible asset to the lessee, but do not involve the transfer of the bulk of risks and rewards of ownership to the lessee. Operating leasing may*

also be called leasing or rental services of specified produced assets, such as buildings or equipment, as specified in the CPC. Rental is also used as a term for the amounts payable under operating leases for produced assets, and is a service.³⁰

11.154 Operating leasing can be identified by the following characteristics:

- (a) The lessor, or owner of the equipment, normally maintains a stock of assets in good working order that can be hired on demand, or at short notice, by users;
- (b) The assets may be leased out for varying periods of time. The lessee may renew the rental when the period expires; and
- (c) The lessor is frequently responsible for the maintenance and repair of the asset as part of the service that is provided to the lessee. The lessor must normally be a specialist in the operation of the asset and may also undertake to replace the equipment in the event of a serious or prolonged breakdown.

Thus, in addition to the provision of an asset, the service provided under operating leasing by the lessor includes other elements, such as convenience and security, servicing, and back-up facilities.

11.156 Operating leasing services cover leasing (rental) and charters of ships, aircraft, and transport equipment, such as railway cars, containers, and rigs, without crew. Also included are operating lease payments relating to other types of equipment without an operator, including computers and telecommunications equipment. License payments for the right to use intangible produced assets, such as software, intellectual property, and so forth are included under specific headings

³⁰In contrast, rent is used to describe the income receivable by the owner of nonproduced nonfinancial assets (the lessor or landlord) for putting the assets at the disposal of another institutional unit (a lessee or tenant) for use in production. Rent is recorded in the earned income account, as discussed in paragraphs 12.85–12.90.

(computer services, charges for the use of intellectual property n.i.e., etc.) rather than operating leasing. Also excluded from operating leasing services are leasing of telecommunications lines or capacity (included in telecommunications services) and rental of ships and aircraft with crew (included in transport services).

11.155 An operating lease is distinguished from:

- (a) a financial lease, where the risks and rewards of ownership of the asset are transferred to the lessee; with an operating lease, the lessor has the risks and benefits (see paragraphs 5.56–5.60 for definition and elaboration on financial leases);³¹
- (b) a resource lease, where the asset provided is a nonproduced natural resource, rather than a produced asset (see paragraphs 5.60 (b) and 12.85–12.90 for a definition and elaboration on resource leases and rent); and
- (c) a lease included under contracts, leases, and licenses, where the lease itself—rather than the underlying asset—becomes an economic asset of the lessee. (See paragraph 14.12 for elaboration on these leases.)

11.156-1 In some instances, MNEs may establish special purpose entities (SPEs) for undertaking operating and financial leasing arrangements within the group companies. For example, SPEs may hold assets such as planes and lease them to parent company under operating lease. In such cases, SPEs remain separate institutional units from their nonresident parents and responsible for the immediate risks and rewards of the assets they own/lease. Therefore, such captive

³¹ International Financial Reporting Standards (IFRS) 16 “Leases” is not aligned with the 2025 *SNA/BPM7* concept of economic ownership for determining and recording operating and financial lease transactions. Practical guidance on distinguishing operating and financial leasing from the financial statements of corporation applying IFRS 16 to be provided in the *BPM7 Compilation Guide*.

leasing arrangements should be treated as operating leases following the guidance provided in paragraphs 11.154. See [Special Purpose Entities: Guidelines for a Data Template](#) and Section C.2, Chapter 15 for further information on the typology and description of SPEs including those engaged in captive financial and operating leasing.

11.156-2 Two main types of leasing arrangements, largely prevalent in the aircraft industry, are elaborated further:

- Wet leasing (covers provision of an aircraft , complete crew, maintenance, and insurance for which payment is by hours operated), which is normally used for short-term leasing (for balance of payments purposes recorded under transport services); and
- Dry leasing (covers provision of an aircraft without insurance, crew, ground staff, supporting equipment, maintenance, etc.), which is more usual for the longer-term leases and is recorded, for balance of payments purposes, under operating leasing services.³² The aircraft industry also uses combinations of wet and dry when, for example, the aircraft is wet-leased to establish new services and then, as the airlines flight or cabin crews become trained, they are switched to a dry lease.

11.157 Operating leases of dwellings and other buildings are included in this item, if not included in travel. If there is no objective basis on which to split the

³² Dry leasing could be considered as a special kind of operating lease, where the lessor remains the economic and legal owner, but the expenses on insurance, repair and maintenance are the responsibility of lessee. In practice, it may be difficult to know whether such lease is financial or operational. Invoices issued by the lessor is one of the useful sources for distinguishing between financial and operating leases. Typically, for an operating lease, an invoice includes an amount of a single payment, whereas for a financial lease, the invoice provides information about the amount of principal and interest separately. See Box 8, *Eurostat's Handbook on the compilation of statistics on sea and air transport in national accounts and balance of payments*, for additional guidance.

payment between rent on land and rental on the buildings, it is recommended to treat the whole amount as rental when the building component is believed to exceed the land component, and as a rent otherwise. However, rent of land alone and rent of other nonproduced natural resources (such leases are called resource leases; see paragraph 12.85-86) as well as rent related to other nonproduced nonfinancial assets are classified as earned income. Rental of buildings by international organizations, embassies, and so forth, is included under government goods and services n.i.e. Rental of accommodation and vehicles to nonresidents during visits to other economies is included in travel (see paragraphs 11.86–11.88).

o. Technical and other business services

11.158-1 Technical and other business services include:

- (a) architectural, engineering, scientific and other technical services (discussed further in paragraph 11.158-2);
- (b) waste treatment and depollution, agricultural, and mining services (discussed further in paragraph 11.158-3); and
- (e) other business services (discussed further in paragraph 11.159).

Architectural, engineering, scientific and other technical services

11.158-2 Architectural services include transactions related to the design of buildings. Engineering services include the design, development and utilization of machines, materials, instruments, structures, processes and systems. Services of this type involve the provision of designs, plans and studies related to engineering projects. Mining engineering is excluded and included instead in waste treatment and depollution, agricultural, and mining services (see paragraph 11.158-3).

Scientific and other technical services include surveying; cartography; product testing and certification; and technical inspection services.

Waste treatment and depollution, agricultural, and mining services

11.158-3 Waste treatment and depollution services include waste collection and disposal, remediation, sanitation, and other environmental protection services. They also include environmental services, such as treatment of air pollution, carbon capture and storage services that are not classified under any more specific category.

Other business services

11.159 Other business services include distribution services related to water, steam, gas, and other petroleum products and air-conditioning supply, where these are identified separately from transmission services; placement of personnel, security, and investigative services; translation and interpretation; photographic services; publishing; building cleaning; and real estate services. In addition, services provided by fee-based digital platforms that facilitate interactions between users other than transactions in goods and services or financial transactions (e.g., online dating and matrimonial platforms) are included (see paragraph 16.xx). Also included under other business services are forfeited down payments not able to be specified to any other service.

k. Personal, cultural, and recreational services

11.161 Personal, cultural, and recreational services consist of (a) audiovisual and related services and (b) other personal, cultural, and recreational services.

Audiovisual and related services

11.162 Audiovisual and related services consist of services and fees related to the production of motion pictures (on film, videotape, disk, or transmitted electronically, etc.), radio and television programs (live or on tape), and musical recordings. Table 11.4 summarizes the treatment of intellectual property associated with audiovisual and related services, as well as other types of intellectual property.

11.163 Included are amounts receivable or payable for rentals of audiovisual and related products, and charges for access to audio and video streaming services, encrypted television channels (such as cable and satellite services). Fees to actors, directors, and producers involved with theatrical and musical productions, sporting events, circuses, and other similar events are included in this item (unless they are employees of the entity making payments, in which case the transactions are classified as remuneration of employees). The users of free online platforms (which are mostly organized as commercial enterprises) may create content such as videos, images, text, and audio, and make them available on the platforms. If the content creator receives remuneration from an advertiser or platform for use of their uploaded content, it should be recorded as supply of audiovisual related services to the platform. (see paragraphs 16.xx-xx for additional details on free online platforms).

11.164 Mass-produced recordings and manuscripts that are purchased or sold outright or for perpetual use are included under audiovisual and related services if downloaded (i.e., delivered electronically). However, those on physical media, are included in general merchandise. Similar products obtained through a license to use (other than when conveying perpetual use) are included in audiovisual and related services, as is the use of other online content related to audio and visual media. (See paragraph **11.166 for the treatment of originals.**) The principles for the timing for related audiovisual and related services, such as for music and film copyrights

and for master recordings, are the same as those for other types of intellectual property, as discussed in [paragraph 11.139](#).

11.165 Charges or licenses to reproduce or distribute (or both) radio, television, film, music, and so forth are excluded from audiovisual and related services and included in charges for the use of intellectual property n.i.e.

11.166 Purchases and sales of original manuscripts, sound recordings, films, and so forth are included in audiovisual and related services.

Other personal, cultural, and recreational services

11.167 Other personal, cultural, and recreational services include health services, education services, and others, as discussed in the following paragraphs.

11.168 Health services consist of services provided by hospitals, doctors, nurses, and paramedical and similar personnel, as well as laboratory and similar services, whether rendered remotely (sometimes referred to as tele-healthcare) or on-site. However, health services provided to nonresidents who are present in the territory of the service provider are included in travel (see also [paragraph 11.94](#)). Veterinary services are included in other technical and other business services (see [paragraph 11.158-3](#)).

11.169 Education services consist of services relating to education, such as correspondence courses and education via television or the Internet (sometimes referred to as tele-education), as well as by teachers and so forth who supply services directly in host economies. However, education services provided to nonresidents who

are present in the territory of the service provider are included in travel (see also paragraph 10.94).³³

11.170 Other personal, cultural, and recreational services include those associated with museums and other cultural, sporting, gambling, and recreational activities, except those included in travel. The fees and prizes of athletes are included.

11.171 The amounts paid for lottery tickets or placed in bets consist of two elements:

- (a) a service charge receivable by the unit organizing the lottery or gambling (this charge may also have to cover taxes on gambling); and
- (b) transfers to cover the amounts payable to the winners and, in some cases, amounts payable to charities.

The value of the lottery and other gambling services supplied by or to nonresidents is estimated as the amount wagered by nonresidents multiplied by the overall ratio of services to the total amount wagered for that gambling operator or type of gambling. This method for separately identifying the service component is similar to the method used for insurance services. For current transfers associated with gambling, see paragraphs 13.25–13.26.

11.172 Acquisition of other personal, cultural, and recreational services (such as education, health, museums, and gambling) by persons while outside their

³³ Educational and health services provided by residents employed by a host-country educational/health institution should be included in remuneration of employees (see paragraph 12.11).

territory of residence is included in travel (see [paragraph 11.88](#)) and excluded from this item.

I. Government goods and services n.i.e.

11.173 Government goods and services n.i.e. cover:

- (a) goods and services supplied by and to enclaves, such as embassies, military bases, and international organizations;
- (b) goods and services acquired from the host economy by diplomats, consular staff, and military personnel located abroad and their dependents; and
- (c) services supplied by and to governments and not included in other categories of services.

Transactions of public corporations (defined in [paragraph 4.108](#)) are not included, unless the other party is one of the specified types of institutions.

Goods and services supplied by and to government and international organization enclaves

11.174 As government and international organization enclaves are not residents of the territory in which they are physically located (as discussed further in [paragraph 4.5\(e\)](#)), their transactions with residents of the territory of location are external transactions. For the same reason, transactions of embassies, military bases, and so forth with their home economies are resident-to-resident and outside the scope of external accounts.

11.175 Government goods and services n.i.e. credits include the supply of goods and services to embassies, consulates, military units or bases, defense

agencies, and other official entities (such as aid missions; government tourism, information, and trade promotion offices) of foreign governments located in the compiling economy.

11.176 Government goods and services n.i.e. debits include acquisition of goods and services by embassies, and so forth of the government of the compiling economy in other territories. Charges for visas and other services provided by embassies and consulates are also included in government goods and services n.i.e. The supply and purchase of goods and services by international organizations are also included in government goods and services n.i.e. The acquisition of goods and services for joint military arrangements, peacekeeping forces, and other services, such as those provided by the United Nations, are also included in government goods and services n.i.e.

11.177 All types of goods and services, such as office supplies, vehicles, repairs, electricity, and rental of premises, for embassies, military bases, international organizations, and so forth purchased from the host economy or economies other than the home economy are included under government goods and services n.i.e. However, construction of new and existing structures is included under construction (see [paragraph 11.108](#)).

Goods and services acquired by staff employed in enclaves and their dependents

11.178 All expenditure on goods and services by diplomats, consular staff, and military personnel located abroad in the economies in which they are located is also included in government goods and services n.i.e. (These staff are classified as nonresidents of the territory of their location, as discussed in [paragraph 4.123](#).) The expenditure of dependent members of the same household is also included. However,

the expenditure of locally engaged staff of embassies, military bases, and so forth and international organization staff is not included in government goods and services n.i.e. (and is usually a resident-to-resident transaction). (These staff are classified as residents of the territory of their location, as discussed in paragraphs 4.123–4.124.) The supply of goods and services to foreign diplomats and so forth located in the compiling economy is shown as credits, while the expenditure of the compiling economy's diplomats and so forth in the economy of their posting is shown as debits. (Goods disposed of by diplomats, and so forth are similarly recorded with the signs reversed; for example, a car sold at the end of a posting is shown as a debit to the local economy.)

Other services supplied by and to governments

11.179 As far as possible, only items corresponding to CPC division 91 (public administration and other services provided to the community as a whole; compulsory social security services) and CPC division 99 (services provided by extraterritorial organizations and bodies) need to be included within this category to ensure harmonization with the System of National Accounts. Services supplied by and to governments (other than those related to government functions) should be classified to specific services (construction, health, etc.), if possible. For instance, acquisition of new and existing buildings for an embassy, consulate, and so forth is classified as construction, rather than government goods and services n.i.e. (see paragraph 11.108). However, some services are related to government functions that are not able to be classified to another specific service category, so are classified as government services n.i.e. For example, technical assistance on public administration is included in government services. Also, payments for police-type services (such as keeping order), such as those supplied with mutual agreement by a foreign government or international organization, are included in government

services n.i.e. Additionally, government supply of licenses and permits that are classified as services (as discussed in paragraphs 11.180) are also government services n.i.e. Box 11.6 covers issues associated with technical assistance.

Government licenses, permits, and so forth

11.180 One of the regulatory functions of governments is to forbid the ownership or use of certain goods or the pursuit of certain activities, unless specific permission is granted by issuing a license or other certificate for a fee. As indicated in paragraph 13.30, if a payment for a license is compulsory and the license is not transferable then the payment is generally considered a tax. However, under limited scenarios, such as when it can be demonstrated that the payment is required and a service commensurate to the payment is consumed by the individual, the payment should be recorded as a sale of service.³⁴

³⁴In the case of permits issued by the private sector, treatment as a tax is not an option, so the fee can only be a service or contract, lease, or license asset. In the case of licenses (government or private) that may be resold by the holder, the resale is recorded in the capital account under contracts, leases, and licenses (see paragraphs 14.11–14.16).

Box 11.6. Technical Assistance***Who provides technical assistance?***

Technical assistance is provided by the entity that employs the personnel delivering the services (technical assistance personnel), which could include a non-government entity. The provider is not necessarily the same as the party that provides the funding.

What is the residence of the technical assistance provider?

Technical assistance provided by an entity resident in the donor economy should be recorded as an export of a service by the donor economy to the recipient economy.

How is technical assistance classified?

Technical assistance covers a wide variety of different services, including computing and business services, and should be classified by the nature of the service provided to specific services, if possible. Technical assistance provided by government, or an international organization, is classified as government services only when not classified to a specific service, and where the technical assistance personnel are employed by the donor government or an international organization.

How is technical assistance funded?

Technical assistance may be subject to payment by the recipient, or funded by a current or capital transfer from the donor.

When cross-border technical assistance is provided without a fee being charged to the recipient, a current or capital transfer for the value of the services provided is recorded. If a third party funds the costs of technical assistance, then the funds provided are routed through the recipient economy to the service (or technical assistance) providing economy.

In principle the value of the services provided is estimated by the costs incurred by the donor government (including any costs in the donor economy, recipient economy, or a third economy) in providing technical assistance. In the absence of detailed information the value could be estimated by the salary paid to the technical assistance personnel plus any other identifiable costs (such as travel costs).

How are payments to technical assistance personnel classified?

If the technical assistance personnel are resident in the donor economy and employed by the donor government, payments to these technical assistance personnel are only recorded in the domestic accounts of the donor economy.

If the technical assistance personnel are resident in the recipient economy (or any economy other than the donor economy) but employed by the donor government, remuneration of employees payable by the donor economy is recorded in the external accounts (**paragraph 12.15**).

If the technical assistance personnel are resident in the recipient economy, considered employed by the recipient government, but their salaries are paid by the donor government, a current transfer from the donor to the recipient economy

(paragraph 13.47) is recorded in the external accounts, with the recipient government imputed as paying remuneration to the resident technical assistance personnel in the domestic accounts of the recipient economy. In this case, the output of the technical assistance is attributed to the recipient economy.

If the technical assistance personnel are resident in the recipient economy but are not considered to be in an employer-employee relationship with the donor or the recipient entity (see paragraphs 12.11–12.12) then payments to them are classified as payments for services, not the remuneration of employees.

If the technical assistance activities in the recipient economy are such that a branch is recognized (paragraphs 4.26–4.28) and the technical assistance personnel are employed by the branch, payment of remuneration by the donor economy is rerouted through the branch as equity.

Chapter 12. Earned Income Account[¶]

(Update to *BPM6* Chapter 11)

Chapter 12 Earned Income Account

A. Overview of the Earned Income Account

Reference:

2025 *SNA*, Chapter 8, Earned Income Accounts.

12.1 *The earned income account records incomes earned by institutional units as a consequence of their involvement in processes of production or ownership of assets that may be needed for purposes of production. In the SNA, earned income is recorded in two accounts, namely, the generation of earned income account (which records earned income generated in the production process) and the allocation of earned income account (which records earned income allocated to institutional units for the provision of labor, financial assets, and nonproduced nonfinancial assets). In the external accounts, all earned income flows relate to the allocation of earned income account.*

12.2 The main components and structure of the account are shown in Table 12.1. Credit/revenue entries reflect earned income receivable by the compiling economy and debit/expenditure entries reflect earned income payable by the compiling economy. The balance on earned income shows net earned income receivable by the compiling economy,

[¶] Note: This Chapter is concurrently undergoing [Global Consultation](#).

which is defined as the total value of earned income receivable by the compiling economy less the total value of earned income payable.

12.3 Two types of earned income are distinguished:

- (a) Income associated with the production process. *Remuneration of employees is total remuneration, in cash or in kind, payable by an enterprise to an employee in return for work done by the latter during the accounting period.* Taxes on production and on imports, and subsidies are also income related to production; and
- (b) Income associated with the ownership of financial and nonproduced nonfinancial assets. *Property income is the income receivable by the owner of a financial asset or the owner of a nonproduced nonfinancial asset in return for providing funds to or putting the [nonproduced] nonfinancial assets at the disposal of, another institutional unit.* Property income is therefore made up of investment income and rent. *Investment income is the income receivable by the owner of a financial asset in return for providing funds to another institutional unit.* Investment income consists of dividends and withdrawals from income of quasi-corporations, reinvested earnings, and interest. However, ownership of financial derivatives and employee stock options does not give rise to investment income. The relationship between financial assets and the type of investment income they generate is shown in Table [5.2]. Rent is described in more detail below.

12.4 Cross-border earned income flows provide a link between the concept of gross domestic product (GDP) and gross national income (GNI). GDP is linked to the concept of production, in which value added is generated. Contributors to the value added (such as labor, finance, and entrepreneurship) receive returns for their contributions. The economic process of income generation from production together with earned income distributions

result in the GNI for an economy. The difference between the GNI and GDP is equal to the difference of earned income receivable from nonresidents and earned income payable to nonresidents, often described as “net income from abroad.” When labor, financial resources, and nonproduced nonfinancial assets owned by residents are put at the use of nonresidents, earned income is received. When labor, financial resources, and natural resources are owned by nonresidents and are put at the use of residents, earned income is paid. GNI is larger (smaller) than GDP if more (less) income is generated from the provision of labor, financial resources, and nonproduced nonfinancial assets owned by residents to nonresidents than the similar income payable to nonresidents.

12.5 Earned income should be distinguished from transfer income. Earned income captures returns for the provision of labor and financial assets and renting of nonproduced nonfinancial assets. Transfer income captures further redistribution of income through current transfers, such as by governments or charitable organizations. Transfer income is described in Chapter 13.

| Table 12.1. Overview of the Earned Income Account | | |
|---|----------------------|-------------------------|
| | Credits/ Revenues | Debits/ Expenditures |
| <i>Balance of goods and services</i> | | |
| Remuneration of employees | | |
| Investment income | | |
| Direct investment ¹ | | |
| Income on equity | | |
| Dividends and withdrawals from income of quasi-corporations | | |
| Reinvested earnings | | |
| Interest and similar returns | | |

| | | |
|--|--|--|
| Portfolio investment | | |
| Income on equity and investment fund shares | | |
| Dividends on equity other than investment fund shares | | |
| Investment income attributable to collective investment fund shareholders | | |
| Dividends on collective investment fund shares | | |
| Reinvested earnings on collective investment fund shares | | |
| Interest and similar returns | | |
| Other investment | | |
| Income on equity and investment fund shares | | |
| Interest and similar returns | | |
| Investment income attributable to policyholders in insurance, standardized guarantees, and pension funds | | |
| Reserve assets | | |
| Income on equity and investment fund shares | | |
| Interest and similar returns | | |
| Other earned income | | |
| Rent | | |
| Taxes on production and on imports | | |
| Subsidies | | |
| <i>Total earned income credits/revenues and debits/expenditures</i> | | |
| <i>Balance on earned income</i> | | |
| <i>Balance on goods, services, and earned income</i> | | |
| Note: This table is expository; for standard components, see appendix [9]. | | |
| ¹ Investment income attributable to policyholders is possible under direct investment but considered to be relatively uncommon (see paragraph [6.27]), in this circumstance income should be included in the interest and similar returns component of direct investment. | | |

12.6 The structure of the earned income account is consistent with that of the corresponding financial flows and positions, thus facilitating the analysis of rates of return. For example, rent is shown separately so that it is not mixed with returns on financial assets. Investment income attributable to policyholders in insurance standardized guarantees and pension funds is also to be shown as a separate item, if relevant. Specific further groupings of earned income are discussed in the subsequent sections.

12.7 Section B of this chapter discusses the coverage, timing, and valuation issues for each type of earned income (remuneration of employees, dividends, reinvested earnings, interest, investment income attributable to policyholders in insurance, standardized guarantees and pension funds, rent, and taxes on production and on imports, and subsidies). Section C explains specific issues and possible classification of investment income by functional category of financial assets and liabilities (direct investment, portfolio investment, other investment, and reserve assets).

B. Types of Earned Income

12.8 The external accounts distinguish the following types of earned income:

1. remuneration of employees;
2. dividends and withdrawals from income from quasi-corporations;
3. reinvested earnings;
4. interest and similar returns;
5. investment income attributable to policyholders in insurance, standardized guarantees and pension funds;
6. rent; and

7. taxes on production and on imports, and subsidies.

These income categories are described in paragraphs [12.10–12.94].

12.9 Table [12.1] presents investment income using both functional and instrument classifications of financial assets. Investment income is generally linked to a particular type of financial instrument. For example, dividends are returns on equity and investment fund shares. Sometimes, a group of financial instruments has the same type of investment income. For example, deposits, loans, and debt securities all give rise to interest. This section describes various types of investment income and other types of earned income. The next section includes a description of specific issues on investment income related to the functional categories of financial assets and liabilities.

1. Remuneration of employees

12.10 *Remuneration of employees presents total remuneration, in cash or in kind, payable by an enterprise to an employee in return for work done by the latter during the accounting period.* In the external accounts, remuneration of employees is recorded when the employer (the producing unit) and the employee are resident in different economies. For the economy where the producing units are resident, remuneration of employees is the total remuneration, in cash or in kind, payable by resident enterprises to nonresident employees in return for work done by the latter during the accounting period. For the economy where the individuals are resident, it is the total remuneration, in cash or in kind, receivable by them from nonresident enterprises in return for work done during the accounting period. Residence of enterprises and individuals is described in [Section E of Chapter 4, Economic Territory, Units, Institutional Sectors, and Residence].

12.11 Cross-border remuneration of employees arises only when a resident individual is employed by a nonresident or when a resident employs a nonresident individual.

Therefore, it is important to establish whether an employer-employee relationship exists between a resident individual and a nonresident employer or between a nonresident individual and a resident employer. An employer-employee relationship exists when there is an agreement, which may be formal or informal, between an entity and an individual, normally entered into voluntarily by both parties, whereby the individual works for the entity in return for remuneration in cash or in kind. The remuneration is normally based on either the time spent at work or some other objective indicator of the amount of work undertaken. If an individual is contracted to produce a given result, it suggests a service contract relationship between the entity and a self-employed individual, rather than an employer-employee relationship. Self-employed individuals are deemed to operate their own unincorporated enterprises, and thus sell output they produce. Self-employed individuals may also employ others. Self-employed individuals are generally responsible for decisions on markets, scale of operations, and finance, and are also likely to own or rent machinery or equipment on which they work.

12.12 When an individual performs work for an entity, it may not always be clear whether an employer-employee relationship exists between the individual and the entity. Provision of several types of services may pose such problems because entities may choose either to purchase a service (including those services provided remotely) from a self-employed worker or to hire an employee to perform the job. The status of the worker has important implications for the external accounts. If an employer-employee relationship exists between the worker and the producing entity, the payment constitutes remuneration of employees. If an employer-employee relationship does not exist, the payment constitutes a purchase of services. (See Chapter 11, *Services Account* for specific categories of services.)

12.13 Several factors may have to be considered in determining whether an employer-employee relationship exists. An important test of whether an employer-employee relationship exists is that of control. The right to control or to direct, both as to what shall be

done and how it shall be done, is a strong indication of an employer-employee relationship. The method of measuring or arranging for the payment is not important as long as the employer has the effective control on both the method and the result of the work undertaken by the individual. However, certain control on the work being undertaken may also exist for the purchase of a service. Therefore, other criteria should also be used to define more clearly the employer-employee relationship. If the individual is solely responsible for social contributions, that would suggest that the individual is a self-employed service provider. Payment of social contributions by the employer is an indication of employer-employee relationship. If the individual is entitled to the same kind of benefits (e.g., allowances, holidays, sick leave) that the enterprise generally provides to its employees, this indicates an employer-employee relationship. Payment of taxes on the provision of services (such as sales tax or value-added tax) by the individual is an indication that the individual is a self-employed service provider.

12.14 Cross-border employees include seasonal or other short-term workers (less than one year) and border workers who are residents of one economy and work in another economy. Nonresidents who are employed as domestic helpers or housekeepers (for less than one year) by resident households are also treated as nonresident employees. Because embassies, consulates, military bases, and so forth are considered extraterritorial to the economies in which they are located (see Chapter 4, Economic Territory, Units, Institutional Sectors, and Residence; Section E, Residence, for the definition of residence), the remuneration receivable by local (host country) staff of these institutional entities is classified as payable to resident entities by nonresident entities. Remuneration receivable by employees from international organizations, which are extraterritorial entities, represents receipts from nonresident entities.

12.14a Remote work, also known as telecommuting, telework, work from home, and other similar terms, refers to the practice of employees working from locations other than the

traditional office. When employers and employees reside in different economies, the payment for remote work should be recorded as remuneration of employees. Some employers offer their employees the opportunity to work for extended periods away from the office. Paragraph [4.126] outlines factors that need to be considered where the principal residence of the employee is difficult to establish. Remuneration of such workers is recorded in the balance of payments only if the employee is classified as being resident in a different economy than the employer.

12.15 According to the residence principles for households as explained in paragraphs [4.116–4.130], technical assistance personnel employed by international organizations or governments on long-term assignments (for one year or more) are residents of the economy in which they reside (unless they are government employees with diplomatic status). Similarly, employees of parent enterprises working in an affiliated enterprise in another economy for one year or more are residents of the economy in which they reside. Although such employees continue to be legally employed and paid by the parent enterprise (which may be international organizations, foreign governments, or commercial enterprises), their employer-employee relationship may not always be clear. They should be considered employees of the institutional unit for which they work if this unit effectively manages and controls their work. The contractual arrangement for hiring or paying salaries may simply be a matter of convenience. In some cases it may be difficult to determine who is managing and controlling the work. In such cases, the workers should be considered to be employed by the entity that pays them.

12.16 Remuneration of employees is recorded on an accrual basis. It is measured by the value of the remuneration in cash or in kind that an employee becomes entitled to receive from an employer with respect to work undertaken during the relevant period, whether paid in advance, simultaneously, or in arrears of the work itself. To the extent that payment has not been made for work performed, the economy of the employer must record an entry in the

accounts payable and the economy of the employee must record an entry in the accounts receivable.

12.17 Although not shown explicitly in the external accounts, it is helpful to note that remuneration of employees has three main components:

- (a) wages and salaries in cash,
- (b) wages and salaries in kind, and
- (c) employers' social contributions.

a. Wages and salaries in cash

12.18 *Wages and salaries in cash consist of remuneration of employees payable in cash (or any other financial instruments used as means of payments), except for social contributions payable by employers. Included are basic wages and salaries; extra pay for overtime, night work, and weekend work; cost of living allowances, local allowances, and expatriation allowances; bonuses; annual supplementary pay, such as “thirteenth month” pay; allowances for transportation to and from work; holiday pay for official holidays or annual holidays; and housing allowances. Wages and salaries in cash do not include the reimbursement by employers of expenditures made by employees in order to enable them to take up new or relocated jobs (e.g., reimbursement for travel and related expenses) or expenditures on items needed to carry out their work (e.g., tools or special clothing). These are considered acquisitions by the employer of goods and services. Wages and salaries in cash include any social contributions, income taxes, etc., payable by the employee even if they are actually withheld by the employer for administrative convenience or other reasons and paid directly to tax authorities,*

b. Wages and salaries in kind

12.19 Wages and salaries in kind consist of amounts payable in the form of goods, services, interest forgone, and shares to employees in return for labor input rendered. Examples are meals; accommodation; sports, recreation, a car, or holiday facilities for employees and their families; transportation to and from work; goods and services from the employer's own processes of production; bonus shares distributed to employees; and so forth. Benefits in kind should be valued at the market-equivalent price (for instance, in the case of a car, the value would be the actual cost to the employer). The goods or services may be provided free or at a reduced cost. For example, when employees receive loans at reduced or zero rates of interest, the interest forgone is the difference between the interest charged and a market-equivalent interest charge and is recorded as a continuous stream of remuneration payments. To provide a consistent and economically meaningful way of recording remuneration in kind, some "rerouting" may be involved (see paragraph [3.16] for an example of rerouting). That is, although the good or service is purchased by the employer, it is treated as if the employer paid the amount to the employee who, in turn, acquired the item. The rerouting may affect the resident-to-nonresident nature of the transaction.

12.20 Employee stock options (ESOs) are a way of paying wages and salaries in kind. ESOs are valued by reference to the fair value of the equity underlying the ESO awarded. The value of ESOs at the time of granting provides the measure of remuneration of employees that should be recorded as accruing over the period to which the option relates, generally the period between the granting and vesting dates (see paragraph [8.41]). Sometimes, the options may cover the period before the granting date, which should also be taken into account in allocating the remuneration of employees. The value of the ESO accumulates as remuneration of employees is recorded, so that at vesting date, it has accumulated to the value of the ESO at granting. Changes in the value of ESOs at or after the vesting date are not remuneration of employees but are holding gains and losses (see

paragraph [9.30]). Transactions and positions in ESOs are recorded within financial derivatives and ESOs, with a supplementary item for economies in which cross-border transactions in ESOs are significant.

12.21 In cross-border situations, a multinational parent company may directly provide ESOs to employees of its foreign subsidiaries. The value of ESOs should be recorded as remuneration of employees payable by the subsidiary, the actual employer, and hence this transaction is domestic. The liabilities of the parent companies and acquisition of assets by the employees of the subsidiary in the form of ESOs are recorded in the respective economies' external accounts. If the ESO is supplied free or below cost to the subsidiary, a transaction between the parent and actual employer should be imputed for the value of the ESO similar to the treatment of transfer pricing (see paragraphs 12.101–12.102).

c. Employers' social contributions

12.22 *Employers' social contributions are social contributions payable by employers to social security funds and other social insurance schemes, to secure social benefits for their employees.* Social security schemes are operated by general government; other social insurance schemes may be operated by the employers themselves or by an insurance corporation or may be an autonomous pension scheme. Examples of social benefits include pensions, life insurance, and health insurance; allowances for children, spouse, family, education, or other payments with respect to dependents; payments made to workers absent from work because of illness, accidental injury, maternity leave, and so forth; and severance payments. Both actual and imputed social contributions are included in the remuneration of employees. For defined contribution pension schemes, the actual amounts payable by employers are included. For defined benefit pension schemes, including unfunded pension schemes, the amount of employers' social contributions should be determined on the basis of actuarial calculations that yield contributions required to secure the increase in entitlements

resulting from the employee service in the current period (the current service increase). (See paragraph [5.66] for the definition of pension entitlements.)

12.22b As employers' social contributions are made for the benefit of their employees, their value is recorded as one of the components of remuneration of employees together with wages and salaries in cash and in kind. The social contributions are then recorded as being paid by the employees as current transfers to the social security schemes or other social insurance schemes (see also paragraph [12.35] and/or [13.32a]).

12.23 Employees who are employed outside their economy of residence may incur costs for transportation to and from work in the economy of their employment for which they receive an allowance from their employer. Furthermore, nonresident employees (including remote workers) may be subject to the payment of income taxes (see paragraph [13.28]). These flows should be recorded on a gross basis respectively as travel expenditures and taxes on income; that is, they should not be deducted from compensation of employees.

2. Dividends and withdrawals from income of quasi-corporations

12.24 *Dividends are earnings distributed to the owners of corporate equity for placing funds at the disposal of corporations.* Raising equity through the issue of shares is an alternative way of raising funds compared to borrowing. In contrast to debt financing, however, equity finance does not give rise to a liability that is fixed in monetary terms and does not entitle the holders of shares of a corporation to a fixed or predetermined income. Owners of equity receive their share of distributed earnings, the timing and amounts of which are decided by corporations. Owners are also entitled to the residual value of the assets of the corporation in the event of its liquidation (see paragraph [5.21]).

12.25 The concept of dividends is linked to the instrument classification; namely, they are the return payable by corporations to their shareholders or owners.² Dividends are most often quoted in terms of the amount of money declared payable per share. They may also be quoted in terms of a percentage of the market value of shares, referred to as dividend yield. Income on nonparticipating preferred shares (see paragraph [5.46]) is treated as interest income, rather than dividend income, because such shares are classified as debt instruments. Share buybacks are not treated as the distribution of dividends. They are recorded as financial transactions, as purchases of own shares by the relevant corporations.

12.26 In addition to dividends from corporations, withdrawals from income of quasi-corporations (such as distributed branch profits) should be included under this heading. In legal terms, quasi-corporations cannot distribute income in the form of dividends. Nevertheless, the owner, or owners, of a quasi-corporation may choose to withdraw some or all of the income of the enterprise, and some quasi-corporations formally organized as trusts, partnerships, or other institutions may formally distribute some or only a portion of their earnings. From an economic point of view, the withdrawal of such income is equivalent to the distribution of corporate income through dividends and is treated in the same way. Income from rent earned on land and rentals earned on buildings directly held by nonresidents less costs involved is also classified under dividends and distributed incomes from a notional direct investment enterprise (see paragraphs 4.34-4.40]).

12.32 Dividends are also identified for equity in investment funds. Investment in investment funds is usually classified in portfolio investment. Investment in investment funds may also occur in other investment but never in direct investment (even if the investor holds an equity stake that is greater than 10 percent). For equity in investment funds and direct

²Dividends under reverse transactions and manufactured dividends are discussed in paragraph [12.69] and Annex [X].

investment, the owners' earnings include both the distributed income and reinvested earnings.

12.27 Dividends paid by corporations to direct investors and withdrawals from income of quasi-corporations by their direct investors include any distributions to their owners from the current period or accumulated reserves from ordinary earnings in previous periods. Corporations often smooth the payments of dividends, sometimes paying out less than the current period's entrepreneurial income but other times paying out more (see paragraph [12.33a] for a definition of entrepreneurial income). Corporations may also choose to make large infrequent distributions to their shareholders from accumulated earnings of previous periods. Similarly, owners of quasi-corporations may make withdrawals from accumulated earnings of previous periods. For distributions to direct investors, no attempt is made to align dividend payments with earnings for any given period.

12.27a Dividends and withdrawals from income of quasi-corporations do not include funds realized by the sale or disposal of assets of the corporation or the quasi corporation (e.g., the sale of inventories, fixed assets, land or other natural resources, or the liquidation of financial assets). Transmittal of funds resulting from such disposals or liquidations of assets is recorded as a withdrawal of equity in the financial account.

12.27b For portfolio investment and other investment, all exceptional payments made out of accumulated reserves, as well as payments arising from non-operating activities (such as sales of assets), are considered superdividends and are treated as withdrawals of equity in the financial account. (The term superdividends is used to refer to *large and irregular payments or payments that exceed the entrepreneurial income of the year. They are funded from accumulated reserves or sales of assets, and are recorded as withdrawal of equity equal to the difference between the payment and the entrepreneurial income of the relevant accounting period. The concept of superdividends does not apply to foreign direct*

investment where only exceptional payments due to sales of assets are recorded as withdrawal of equity.)

12.27c The treatment of payments from accumulated reserves to direct investors is therefore different from similar payments to portfolio or other investors, or to domestic shareholders. However the recording of dividends does not affect the total direct investment income. This is because direct investment income on equity is made up of dividends or withdrawals of income from quasi-corporations and reinvested earnings. The treatment makes visible the conscious decision on the part of the direct investor to distribute or to reinvest income earned over current and past periods. It may be useful to separately identify exceptional payments from accumulated reserves to direct investors, for their analytical value and for comparability with the treatment of superdividends on other types of investment. Payments from accumulated reserves is thus introduced as a supplementary sub-item of dividends in the external accounts.

12.28 Stock dividends arise where stockholders elect to receive payments of dividends in the form of issue of new shares. The stock dividends are essentially a capitalization of earnings and an alternative to distributing cash dividends. Therefore, stock dividends are treated as dividend income (in the earned income account), which is then immediately reinvested (in the financial account).

12.29 Bonus shares refer to issues of new shares to all stockholders in proportion to existing ownership. These arrangements are not treated as transactions because no new resources have been provided. The claim of the shareholders on the entity is the same before and after the issuance of bonus shares. (See also paragraph [8.33].)

12.30 Liquidating dividends, whether partial or total, arise mainly at the time of the termination of a company. These are treated as a withdrawal of equity, shown in the financial

account, as a convention based on the assumption that liquidating dividends are more likely to involve previously existing equity finance rather than current income.

12.30a The reduction in equity arising from the disposal or sale of assets (including from liquidating assets) can be displayed as “of which, from sales of assets” in the financial account.

12.31 Dividends are recorded at the time the shares go ex-dividend (see paragraph [3.48] for recording of dividends). In some cases (such as when the equity is unlisted) the ex-dividend date may not be known, and the payment date can be used. Withdrawals from income of quasi-corporations, that is, distributed profits, are recorded when they are withdrawn by their owners. Dividends and withdrawals from income of quasi-corporations are recorded gross of any withholding taxes. These taxes are deemed to be payable by recipients of such income.

3. Reinvested earnings

12.33 This section describes the treatment in the external accounts of reinvested earnings from equity participation. Reinvested earnings of a corporation or quasi-corporation are earnings accruing to direct investors less the amounts already payable to direct investors through dividend distribution or through withdrawals from income of quasi-corporations. Reinvested earnings of collective investment funds are defined in the same way. Attribution of cross-border income (of which reinvested earnings is a part) is particularly important for deriving consistent and comparable measures of national disposable income and national saving.

12.33a When discussing reinvested earnings of a corporation or quasi-corporation, it is helpful to introduce the associated concepts of entrepreneurial income and distributable income.

Entrepreneurial income is formally stated as:

Income earned by the production of goods and services (operating revenue *minus* operating expenses and depreciation)

+ Property income receivable (including dividends or withdrawals from income of quasi-corporations, reinvested earnings, interest and similar returns, rent, and other property income)

- Property income payable excluding dividends or withdrawals from income of quasi-corporations and reinvested earnings.

Distributable income is formally stated as:

Entrepreneurial income

+ Current transfers receivable less current transfers payable

- Adjustment for the change in pension entitlements relating to the pension scheme of that corporation.

(These items refer to domestic and cross-border transactions of the enterprise and correspond exactly to *SNA* items; see also paragraphs [12.44 and 12.45] as well as additional information on the treatment of particular items of revenue and expenditure in the *2025 SNA*.)

12.33b The term distributable income refers to income arising from current operations, from property income, and from current transfers (before any dividends or reinvested earnings are deemed payable) that are available to corporations for distribution to investors in proportion to their equity participation. If the corporation makes a dividend distribution this will reduce each investors' share of distributable income by the amount received as a dividend. The difference between the distributable income and dividends paid to shareholders is retained by the corporation.

12.35 In macroeconomic statistics, corporations are defined as entities separate from their owners and able to take economic decisions (see paragraphs [4.13–4.15] for the definition of corporations as institutional units). Owners receive dividends and face other financial gains and losses arising from the activity of the corporations they own.³ For corporations, the notion that the institutional units are decision-making entities implies that retained earnings are treated as the income and saving of that entity rather than those of its owners. So, the undistributed income arising from the net operating surplus, net property income, and net current transfers is recorded as retained earnings or net saving of corporations. Losses are negative net saving. Quasi-corporations, such as branches and notional units, are treated in the same way as incorporated entities (except that dividends would be replaced by withdrawals from income).

12.36 However, when retaining earnings is a deliberate decision of owners to reinvest, treating them as if they were retained by corporations would not reflect economic reality. Although most economic relationships between a corporation and its owners may be considered to take place in an arm's length situation, the distribution or non-distribution of its net earnings to its owners can be seen to be approved by its owners. In particular, because of the control and influence direct investors have on corporate decisions, reinvested earnings are treated as being distributed to the owners who then are deemed to reinvest back in their enterprises.

12.36b Reinvested earnings are recorded in the period in which the distributable income and dividend distribution or withdrawals from income of quasi-corporations accrue.

³The amount of dividends payable in any given accounting period depends on a range of factors, including the corporation's judgment of its own investment opportunities relative to those available in the market, differences in the tax treatment of distributed and undistributed income, and the degree of influence and control of the owners in management decisions.

⁵Note that the memorandum items in Table 12.2 refer to the position to which the income flows relate, so the heading "direct investor in direct investment enterprises" refers to investment income payable to a direct investor by his or her direct investment enterprises.

The attribution of reinvested earnings to direct investors applies also to investors in collective investment funds.

12.36c The imputation of income to direct investors and to the owners of investment funds is shown in the earned income account as “reinvested earnings” and the corresponding flow is recorded in the financial account as “reinvestment of earnings” (see paragraphs [8.15–8.16] for the recording of financial account entries). Reinvestment of earnings is an imputed financial transaction. In the position data, reinvestment of earnings is not shown separately but included implicitly in the total value of equity.

12.36d Although reinvested earnings are recorded only for equity in direct investment and investment in collective investment funds, it might be argued that the treatment should be consistent for all types of equity investment. For this reason, compilers are encouraged to provide supplementary reporting of information on the implied reinvested earnings of other types of equity investment. A possible change in the guidance, after having gained more experience on this alternative recording, has been put on the SNA/BPM research agenda.

a. Reinvested earnings on direct investment

12.40 Investment income attributable to direct investors on their equity includes dividends, withdrawals from income of quasi-corporations, and reinvested earnings. Reinvested earnings of a direct investment enterprise consist of *the direct investors’ proportion of distributable income of a direct investment enterprise, less amounts declared for dividend distribution to direct investors, or less withdrawals from income of quasi-corporations by the direct investors. Reinvested earnings are treated as being distributed and subsequently reinvested.* Reinvested earnings are attributed to direct investors who are in an immediate direct investment relationship with the direct investment enterprises (i.e., when equity participation by direct investors meets the 10 percent threshold). See Box 11.5 for an

example of the calculation of reinvested earnings. However, reinvested earnings are not attributed to direct investors when the equity participation provides less than 10 percent of the voting power. (For example, a direct investor may directly hold a stake of 1 percent of an indirectly held subsidiary; although it is a direct investor by virtue of the chain of ownership, it is not shown as a direct recipient of reinvested earnings on its 1 percent holding.)

Paragraphs [6.8–6.24] define direct investment relationships. In the case of a government-owned nonresident entity used solely for fiscal purposes, transactions are imputed between the government and the government-owned nonresident entity to reflect the fiscal activities of the government (see paragraphs [8.24–8.26]). Therefore, such government-owned entities do not give rise to reinvested earnings.

12.41 As discussed above, the rationale behind the current treatment of reinvested earnings on direct investment is that, because a direct investment enterprise is, by definition, subject to control, or influence, by a direct investor or investors, the decision to retain and reinvest some of its earnings within the enterprise represents an investment decision on the part of the direct investor(s). Many factors may influence the decisions of direct investors on the proportions of net earnings of direct investment enterprises to be distributed or retained, including taxation systems, transfer costs, investment opportunities in the ongoing business and elsewhere, relative costs of moving financial resources, and need to expand the ongoing business.

12.44 Reinvested earnings are measured on the basis of distributable income after dividends have been distributed to direct investors, or after withdrawals from income of quasi-corporations, and thus linked to the concept of operational earnings generated from production, lending and borrowing financial assets, and renting natural resources, and current transfers. They do not include any costs or income arising from the acquisition or sale of fixed assets. (Fixed assets include buildings and other structures, machinery and equipment, intellectual property products, and other assets recognized in the SNA/BPM. Expenditure on research and

development and own-account production of software are treated as assets and not as expenses.) Reinvested earnings do not include any realized or unrealized holding gains or losses. Holding gains and losses may arise from valuation changes, including exchange-rate-related gains and losses, revaluation of nonfinancial assets, and changes in market prices of financial assets and liabilities. Reinvested earnings also do not include gains or losses due to other changes in volume of assets, such as write-offs of nonproduced, nonfinancial assets, write-offs of bad debts, and uncompensated seizures of assets. Because business accounting measures of profits often include holding gains or losses, adjustments to business accounting records may be necessary. Holding gains and losses and other changes in volume of financial assets and liabilities are described in [Chapter 9, Other Changes in Financial Assets and Liabilities Account]. Provisions for various types of losses, such as for bad debts, are internal bookkeeping entries that should not be taken into account in determining the net saving and reinvested earnings.

12.45 Reinvested earnings of a direct investment enterprise are measured after deducting corporate taxes charged on the income of the enterprise. Such taxes are payable by the enterprise and not by its owners. Furthermore, reinvested earnings should be calculated after deducting depreciation. Depreciation is measured by the value, at current replacement cost, of the fixed assets used up (as a result of physical deterioration, normal obsolescence, or normal accidental damage) during an accounting period. In the calculation of depreciation, the expected economic life of an individual asset should be taken into account. (Expected life and normal obsolescence or damage do not include losses due to wars or major natural disasters.) Depreciation used in the business accounts is not necessarily the same as depreciation used in the national accounts as the business accounts may base depreciation on historic cost or book values, or may use a different depreciation model from the models recommended in the national accounts. Compilers should make

adjustments to depreciation based on business accounts where the calculation of depreciation rates diverge significantly from the rates used in the national accounts.

12.45a Payments of fines and penalties and of compensation could impact the calculation of reinvested earnings. In the case of large fines and penalties (which are treated as current transfers in the external accounts), compilers should base their determination about whether to include fines or penalties as part of the calculation of retained earnings on the specific characteristics of the fine or penalty, including whether it is considered extraordinary (see paragraph [13.54] for a definition of fines and penalties). In the case of compensation payments, only those compensation payments considered current transfers are to be included in the calculation of retained earnings (see paragraph [13.55] for a definition of compensation payments).

12.46 Reinvested earnings can be negative when a direct investment enterprise has a loss on its operations or the dividends declared in a period are larger than distributable income in that period. If direct investment abroad generates negative earnings, the entry should be shown as a negative income credit/revenue by the direct investor. Similarly, the economy of the direct investment enterprise should record the losses as negative income debit/expenditure.

12.47 In a chain of direct investment relationships, reinvested earnings need only be recorded between the direct investor and directly owned direct investment enterprises. The passing of reinvested earnings from indirect holdings should be taken into account through the chain of direct investment relationships. Retained earnings of an enterprise in the chain would include reinvested earnings derived from its immediate direct investment enterprise (see paragraphs [6.8–6.24] for a definition of direct investment relationships), which as a direct investor would receive reinvested earnings from its immediate direct investment enterprise, and so on. Therefore, reinvested earnings are passed on to the indirect direct investors through the chain indirectly, as illustrated in [Box 12.1].

Box 12.1. Reinvested Earnings with Chain of Ownership

Enterprise A has a 100 percent subsidiary Enterprise B, which in turn has a 100 percent subsidiary Enterprise C.

Enterprise A is owned 95 percent by portfolio investors, while Enterprise C owns 5 percent (reverse investment).

In the following example, earnings are as stated and none of the enterprises pays dividends during the period—all earnings are retained; so the following results are obtained for reinvested earnings:

| | Earnings from own operations | Reinvested earnings | |
|--------------|------------------------------|---------------------|------------|
| | | Payable | Receivable |
| Enterprise A | 100 | 0 | 120 |
| Enterprise B | 40 | 120 | 80 |
| Enterprise C | 80 | 80 | 0 |

Notes:

- The reinvested earnings receivable for Enterprise A consist of the reinvested earnings receivable from its immediate direct investment enterprise, Enterprise B. However, the reinvested earnings of Enterprise C are indirectly taken into account through reinvested earnings of Enterprise B. (See paragraph [12.47].)
- No reinvested earnings are payable on the reverse investment equity of Enterprise C in Enterprise A. (See paragraph [12.99].)

b. Investment income attributable to collective investment fund shareholders

12.37 Investment income attributable to collective investment fund shareholders are *dividends and retained earnings of collective investment funds, which are attributable to the shareholders*. Collective investment funds provide a convenient, accessible, and affordable vehicle for financial investment. Typically, collective investment funds sell shares or units to the public and invest in a diversified portfolio of securities, although they may also invest in other assets, including real estate, or they may be limited to a small number of investors (see

paragraphs [4.73–4.75] on collective investment funds as an institutional subsector). Each share represents a proportional equity in the investment portfolio managed by investment funds.

12.38 Earnings from collective investment funds can be viewed as being passed on to their shareholders (or unitholders) as they are earned in the form of investment income on their equity. Collective investment funds earn income by investing the money received from shareholders. Shareholders' income from collective investment funds is defined as the investment income earned on the fund's investment portfolio. When only a part of the net earnings is distributed to shareholders as dividends and imputed dividends (as discussed in the next paragraph), the retained earnings should be treated as if they were distributed to the shareholders (including resident shareholders) and then deemed reinvested. The consequence of the treatment of the retained earnings of collective investment funds is that the saving of investment funds is always zero.

12.38a There are direct and indirect fees that are borne by the shareholders in collective investment funds. The direct fees are charges paid directly by the shareholders to fund managers, brokers and custodians or other service providers. These fees are not considered either as an expenditure from the investment fund (or out of the fund assets) to the service provider or as income paid from the shareholder to the investment fund. Indirect fees are paid out of the income generated by the fund or out of the fund assets. These are expenses paid by the investment fund to third parties, such as fund management companies. However, because the fees are paid by the investment fund on behalf of the shareholder from the income generated from the investments of the fund, these costs incurred by the fund in its day-to-day operations are treated as services provided directly from the professional providers to the shareholders. They are not considered as operating expenses of the fund. The amounts should be treated as an additional component of the investment income attributable to the shareholders from the fund which would be considered as “imputed dividends” and

recorded under dividends and withdrawals from income of quasi-corporations, which are subsequently paid to the service providers for indirect service charges. As a consequence, the total income attributable to the shareholders in the form of dividends (including this additional imputation) and reinvested earnings would be equal to the total earnings on investments by the fund (see box 12.1 for an example of the calculations).

Box 12.1. Numerical example of the treatment of indirect fees paid by the shareholder of investment fund units to service providers

An investment fund in economy A makes investments of securities and other assets in country C on behalf of shareholders in economy B. During the period, the investments yield income to the fund of 20; and the investment fund incurs day-to-day costs of 4 paid to other financial service providers in economy D (these are indirect fees) which are financed from the income received on investment. The investment fund pays a dividend of 5 to shareholders.

The earned income account entries in economy A would be

| | |
|--|------------------------------|
| <i>Investment income to the investment fund (with Economy C)</i> | <i>20 credit/revenue</i> |
| <i>Dividends paid by the investment fund (with Economy B)</i> | <i>9 debit/expenditure</i> |
| of which, “imputed” dividends (with Economy B) | <i>4 debit/ expenditure</i> |
| <i>Retained earnings of the investment fund (with Economy B)</i> | <i>11 debit/ expenditure</i> |

Note that the savings of the investment fund is zero.

The services account and earned income account entries in economy B would be

| | |
|--|----------------------------|
| <i>Investment income to the shareholder (with economy A)</i> | <i>20 credit/revenue</i> |
| Made up of, | |
| <i>dividends</i> | <i>9 credit/revenue</i> |
| of which “imputed” dividends | <i>4 credit/revenue</i> |
| <i>reinvested earnings</i> | <i>11 credit/revenue</i> |
| <i>Imputed service charge (with economy D)</i> | <i>4 debit/expenditure</i> |

12.39 Dividends and retained earnings attributable to owners of investment funds exclude holding gains and losses arising from investment by the funds. Holding gains and losses are recorded as revaluations in the integrated IIP .


4. Interest and similar returns

References:

IMF and others, *External Debt Statistics: Guide for Compilers and Users*, Chapter 2, Appendix, Accrual of Interest Costs—How Should This Be Implemented? And paragraphs [6.15–6.17].

IMF and others, *Handbook on Securities Statistics*

IMF, *Monetary and Financial Statistics Manual and Compilation Guide*, Annex 5.2

12.48 *Interest and similar returns is a form of investment income or interest-like income that is receivable by the owners of certain kinds of financial assets, namely: deposits, debt securities, loans and other accounts receivable and some similar instruments in the case of Islamic finance, for putting the financial asset at the disposal of another institutional unit. Income on SDR holdings and allocations is also treated as interest and similar returns. Not all current account  flows associated with debt instruments are interest and similar returns; some may be commissions or fees, which are charges for financial services (see paragraphs [10.118–10.136] for a discussion of financial services).*

12.49 Interest and similar returns is recorded on an accrual basis; that is, interest and similar returns is recorded as accruing continuously over time to the creditor on the amount outstanding. Depending on the contractual arrangements, interest and similar returns may be a percentage of the amount outstanding, a predetermined sum of money, a variable sum of money dependent on a defined indicator, or some combination of these methods. In the case of Islamic finance, interest or similar returns would be a pre-determined share of profit

related to the sourcing or the use of certain types of funds. Under the accrual basis, as interest and similar returns accrues, the amount outstanding increases; that is, accrued interest and similar returns not yet paid is a part of the amount outstanding. What are commonly referred to as interest payments, therefore, are financial account transactions that reduce the debtor's existing liability. The amount initially advanced or borrowed is also known as initial principal. Periodic coupon payments may cover part or whole of the interest and similar returns accrual during that period as well as payments that reduce the initial principal.

12.49a The guidance below is mainly focused on interest as commonly known. Economies with significant Islamic financial activities are encouraged to create a sub-category within interest and similar returns to present investment income for putting financial assets, such as deposits (or sources of funds), debt securities, loans (or uses of funds) and possibly other accounts receivable, at the disposal of another institutional unit. Specific types of interest-like income, as practiced in Islamic finance, are further elaborated in chapter 17.

a. Currency of denomination and fixed-rate vs. index-linked instruments

12.50 For the purpose of defining and measuring interest, it is useful to distinguish between the following three types of arrangements:

- (a) **Domestic-currency-denominated fixed-rate instruments.** At inception, the contracting parties determine all future cash flows that the debtor must make in domestic currency. Interest for these instruments is the difference between the sum of all debtor's payments and the funds the creditor makes available to the debtor. The information on the amount outstanding and future cash flows needed to calculate interest accruals is known at inception.

- (b) **Foreign-currency-denominated fixed-rate instruments.** At inception, future cash flows are determined in the relevant foreign currency. The recording of interest on foreign currency fixed-rate instruments is also straightforward. Interest is defined as described in (a) above, with the only difference being that, in the first instance, a foreign currency is used as the currency of denomination. Interest expressed in foreign currency is to be converted into the domestic currency at the mid-point market exchange rate for the periods in which the interest accrues. The information on amount outstanding and cash flows needed to calculate interest accruals in the currency of denomination is known at inception. Debt instruments with both the amount to be paid at maturity and all periodic payments (such as coupons) linked to a foreign currency are treated as though they are denominated in that foreign currency.
- (c) **Index-linked instruments.** The indexation mechanism links the amount to be paid at maturity or periodic payments (such as coupons) (or both) to indicators agreed by the parties, and the values of the indicators are not known in advance. As a result, the amount of interest cannot be known at the time of issue. For some instruments, it can be determined only at the time of redemption. Indexed instruments include those indexed to the consumer price index, a stock exchange index, a commodity price, and so forth.

Index-linked debt instruments are those on which payments are linked to a reference item that normally changes over time in response to market pressures. All other debt instruments should be classified as fixed-rate. As noted in paragraph [12.50(b)], debt instruments with both the amount to be paid at maturity and periodic payments linked to a foreign currency are classified and treated as though they are denominated in that foreign currency. All other types of index-linked instruments, including those that are partially linked to exchange rates (e.g., those for which either only the amount to be paid at maturity or only periodic payments are linked to an exchange rate), are treated as being denominated in domestic currency for the

recording of interest and other economic flows. The calculation of interest accrual for index-linked instruments is described in paragraphs [12.59–12.65].

b. Interest on loans, deposits, and accounts receivable/payable

12.51 The nature of financial assets and liabilities in the form of deposits, loans, and accounts receivable/payable is explained in Chapter 5, Classification of Financial Assets and Liabilities. In general, the interest accrual on these financial assets and liabilities is determined by applying the relevant interest rate as specified in the contractual arrangements between parties to the amount outstanding at each point of time throughout the accounting period. Some instruments have a fixed interest rate for the entire life of the instrument. Some instruments may have terms for changes in interest rates, once or several times, during the life of the instrument. For each period, the relevant interest rate should be used to calculate interest accrued in that period. Some loans and deposits may also have indexation of the amount to be paid at maturity or periodic payments (or both). Interest accruals arising from indexation as described in paragraphs [12.59–12.65] also apply to indexed loans and deposits.

h. Pure interest (excluding implicit financial services on loans and deposits)

12.74 Typically, financial intermediaries offer lower rates of interest to their depositors than the rates that they charge to their borrowers. The resulting interest margins are used by the financial intermediaries to defray their expenses and to provide an operating surplus. This method of operation is an alternative to charging customers directly for services. The treatment of this margin (implicit financial services on loans and deposits, formerly referred to as financial intermediation services indirectly measured, or FISIM) and its measurement are described in paragraphs [10.126–10.136].

12.75 The earned income account records “pure interest” by eliminating the implicit charges component from “actual interest.” “Actual interest” payable to a financial intermediary includes the service charge, which should be subtracted to give the interest recorded as investment income in the external accounts. Similarly, “actual interest” receivable from a financial intermediary is seen as having had a service charge already deducted, so the actual interest receivable from the financial intermediary will be increased by the value of the service received to provide interest recorded as investment income in the external accounts. The “pure interest” is calculated using the reference interest rate. The concept of “reference” interest rate and its application are described in paragraphs [10.129–10.130]. “Actual interest” charged or received by banks is needed for certain analytical purposes (for instance, for debt sustainability analysis and analysis of rates of return) and should be disseminated as a memorandum item.

f. Accrual of interest on nonperforming debt

12.70 Amount outstanding of nonperforming debt remains a legal liability of the debtor, so interest should continue to accrue unless the liability has been extinguished (e.g., by repayment or as a result of a bilateral arrangement between debtor and creditor). However, for some analysis, it may be more useful to exclude, from earned income measures, interest that is not realistically expected to be paid. It would, therefore, be useful for the creditor to provide supplementary information on accrued interest on nonperforming debt when it is significant and quantifiable. It is important that metadata should provide information on the method adopted for defining nonperforming debt. Nonperforming loans are described in paragraphs [7.50–7.53].

12.71 Following the accrual principle, arrears on debt repayments (both periodic payments and amount to be paid at maturity) that are not paid on due dates should continue to be shown in the same instrument until the liability is extinguished (see also paragraph [3.56]). For arrears arising from a debt contract, interest should accrue at the same interest rate as on the original debt, unless a different interest rate for arrears was stipulated in the original debt contract, in which case this stipulated interest rate should be used. The stipulated rate may include a penalty increase to the periodic payments on the original debt. If the terms and characteristics of the financial instrument automatically change when it goes into arrears, and its classification is changed, the change should be recorded as a reclassification in the other changes in [financial] assets and liabilities account (see paragraph [3.56] for treatment of arrears). If the contract is renegotiated, transactions are recorded as a new instrument is created. If an item is purchased on credit and the debtor fails to pay within the period stated at the time the purchase was made, any extra charges incurred should be regarded as interest and accrue until the debt is extinguished.

12.72 When a one-off guarantee covering a debt that becomes nonperforming is activated, the guarantor assumes the liability for that debt. From the time of activation of the debt guarantee, the interest accrual becomes the liability of the guarantor. A guarantor may make payments for interest that are due on loans or other interest-bearing liabilities of other units for which it acts as the guarantor. Any interest accruing before the guarantor assumes the debt is a liability of the original debtor and payments by the guarantor should be classified on the basis of contractual arrangements between the guarantor and the original debtor. In most cases, such payments establish a claim by the guarantor on the original debtor, who is obliged to service the debt. In other cases, the claim on the debtor may be an increase in the existing equity participation (e.g., the activation of a guarantee made by a parent company for debt of its subsidiary will improve the balance sheet of the subsidiary and hence the parent company's equity in it). If the guarantor does not obtain a claim on the original debtor, a capital transfer from the guarantor to the debtor is recorded, particularly when the guarantor is a government unit. The treatment of one-off guarantees is described in

paragraphs [8.42–8.45]. ***f1. Negative interest***


12.76a In extraordinary circumstances and in periods of economic distress, negative interest rates can be observed on the deposits of central banks and of commercial banks and on government debt securities. For index-linked bonds where accrued interest is based on movement of the index, negative interest could be observed if the index declines (see [12.62] and Box 12.3). In the balance of payments, negative interest payable on financial instruments is recorded as a negative debit/expenditure and negative interest receivable is recorded as a negative credit/revenue. Economies with significant negative-yielding deposits could consider the incorporation of an “of which” category showing the negative interest income separately in their national publications.

12.76c Negative interest can occur also for securities under a reverse transaction as explained in paragraph [12.69].

i. Interest under high inflation

12.76 High inflation gives rise to specific issues in measuring and interpreting interest. An obvious example is that interest rates for domestic-currency-denominated instruments could be significantly higher than those for foreign-currency-denominated instruments. Thus, nominal interest for domestic-currency-denominated instruments includes compensation for the loss of purchasing power on the monetary value of the funds advanced. The topic of accounting under high inflation is important and more pervasive in the accounts than simply the question of how to measure interest in these circumstances. Indeed, the whole issue of the measurement of transactions on a current price basis is called into question when prices at the end of the period are several times those at the start of the period. Chapter 20, Section E of the *2025 SNA* provides guidance on compiling data in conditions of high inflation..

g. Interest on financial leases

12.73 Financial leases are defined and distinguished from operating leases in paragraphs [5.56–5.58]. The implication of treating financial leases as a loan is that interest accrues  on the loan. The lessor is treated as making a loan to the lessee equal to the market value of the asset, this loan being gradually paid off over the period of the lease. The rate of interest on the imputed loan is implicitly determined by the total amount payable in rentals over the life of the lease in relationship to the market value of the asset at the time of lease initiation. The initial loan to the lessee, together with the lessee's subsequent repayments of the loan, are recorded in the financial account of the lessor and lessee. The interest payable on the loan is recorded in the earned income account. (A numerical example of calculation of items for financial leases is shown in [Box A6b.1].)

c. Interest on debt securities—traded debt instruments and concept of interest

12.52 Defining and measuring interest for traded debt securities, or bonds, is not straightforward. While debtors have obligations to settle according to the terms and conditions set at the inception of the debt instruments, holders of securities acquired in the secondary markets may not know or even care about the interest rate at the time of issue. There are three approaches for defining and measuring interest for traded debt instruments:

- (a) Interest is equal to the amounts the debtors will have to pay to their creditors over and above the repayment of the amounts advanced by the creditors. Interest accrual on a debt instrument is determined for the entire life by the conditions set at inception of the instrument. Interest accrual is determined using the original yield-to-maturity. A single effective yield, established at the time of security issuance, is used to calculate

the amount of accrued interest in each period to maturity. This approach is also known as the debtor approach.

- (b) Interest is the income that follows from applying, at any point in time, the discount rate of future receivables implicit in the instrument's market value. The accrual of interest under this approach reflects current market conditions and expectations. Interest accrual at any given time is determined using the current yield-to-maturity. The effective interest rate for calculating the accrued interest varies with period-to-period changes in the market price of the securities. This approach is also known as the creditor approach.
- (c) Interest is the income that follows from applying the discount rate implicit in the cost at which the instrument was acquired. The accrual of interest under this approach reflects market conditions and expectations at the time of acquisition. Interest is determined using the remaining yield-to-maturity at the time the debt instrument is acquired. The effective interest rate will change only if the security is resold in the secondary market. This approach is also known as the acquisition approach.

12.53 In the external accounts, interest is recorded following the first approach described above in paragraph [12.52(a)]. The same approach is followed in other macroeconomic statistical systems. Interest calculated according to the market rates as described in paragraph [12.52(b)] may be reported as a supplementary item, which is important particularly for analyzing rates of return. It should be noted that for debt securities the valuation and recording of transactions in the financial account and positions in the balance sheets do not depend on the method used for the calculation and recording of interest accrual. Acquisitions and disposals of debt securities are recorded at transaction prices and the positions are recorded at market prices or fair values.

Debt securities with known cash flows

12.54 For debt securities for which the issue and redemption prices are the same (i.e., issued at par), total interest accruals over the whole life of the securities are given by the periodic coupon payments. If coupon payments are fixed, accrued interest can be calculated by allocating the coupon payment to the relevant period using a daily compound formula.

12.55 Certain debt securities, such as short-term bills of exchange and zero-coupon bonds, are such that the debtor is under no obligation to make any payments to the creditor until the liability matures. In effect, the debtor's liability is discharged by a single payment covering both the amount of the funds originally borrowed and the interest accrued and accumulated over the entire life of the liability. Instruments of this type are said to be discounted because the amount initially borrowed is less than the amount to be repaid. The difference between the amount to be repaid at the end of the contract and the amount originally borrowed is interest that must be allocated over the accounting periods between the beginning and end of the contract. The interest accruing in each period is recorded in the earned income account with the same amount increasing the debtor's liability for the same instrument in the financial account. An example is shown as Box 12.2.

Box 12.2. Numerical Example of Calculation of Interest Accrual on a Zero-Coupon Bond



A bond is issued on January 1, Year 1, with 100 repayable in five years, with no coupons.

If the market rate of interest at the time of issue is 10 percent for that maturity and credit rating, then the bond will be issued at a price of 62.09 (that is, $100/1.1^5$).

The annual interest calculations and associated values of the principal are as follows:

| | | |
|-----|--------|-----|
| IIP | Income | IIP |
|-----|--------|-----|

| | Value of Debt Securities January 1 | Interest Accrued | Value of Debt Securities December 31 |
|--------|---------------------------------------|---------------------|---|
| Year 1 | 62.09 | 6.21 | 68.30 |
| Year 2 | 68.30 | 6.83 | 75.13 |
| Year 3 | 75.13 | 7.51 | 82.64 |
| Year 4 | 82.64 | 8.26 | 90.91 |
| Year 5 | 90.91 | 9.09 | 100.00 |

Notes:

- According to the debtor approach (see paragraph 12.52(a)), the interest in each period is fixed at inception.
- The sum of interest over the five years is 37.91, equal to the difference between 62.09 (price at issue) and 100 (price at redemption).
- Interest accrued each year increases in line with the growing accumulated value of accrued interest.
- The corresponding entry to the interest accrued is an increase in debt securities in the financial account. The values of the bond during the period are unknown, because of holding gains and losses. While fluctuations in market interest rates will cause changes in the value, the calculation of interest is unaffected.

(For further details, see *External Debt Statistics: Guide for Compilers and Users* (2014), paragraph 2.66 and Table 2.3.)

12.56 A slightly more complicated case is a discounted instrument that also requires periodic coupon payments. In such cases, the interest rate should be that one at which the present value of future coupon and principal payments equals the issue price of the security. However, the accrued interest may be approximated by summing the amount of the coupon payable periodically plus the amount of interest accruing in each period attributable to the difference between the redemption price and the issue price. Interest accrual from the periodic coupon payments is derived as explained in paragraph [12.54]. Interest accrual from the amortization of the discount (the difference between the issue

and redemption prices) can be calculated by summing daily amortizations for the reporting period. Although amortization rates could be calculated on monthly or quarterly bases, amortization at a daily rate facilitates the allocation of the amortized discount to the individual reporting periods.

12.57 In some cases, debt securities are issued at a premium rather than at a discount. The method of determining the interest accrual is identical to the case of a discounted instrument except that when issued at a premium, the difference between the redemption and issue price is amortized over the life of the instrument and reduces (rather than increases as in the case of the discounted instrument) the amount of interest accruing in each period. Examples of securities issued at par, at a discount and at a premium are shown in Box 12.2.. For further discussion and examples, see *Handbook on Securities Statistics* (2015), Annex 1 and *Monetary and Financial Statistics Manual and Compilation Guide* (2016), Annex 5.2 for examples with semi-annual accruals.

12.58 Stripped securities raise special issues for accrual of interest. Unofficial strips are issued by a third party without the authorization of the original issuer and, hence, the stripped securities are new instruments—a liability of the strip issuer. The original debt securities continue to accrue interest according to the term specified in the contract. Interest on stripped securities accrues at the rate determined at the time of issuance of strips. Official strips (issued with the authorization of the original issuer through a strip dealer it appoints) simply change the arrangements for holding the original instrument, and thus the strips remain the direct obligation of the original issuer. Stripping therefore provides no change to the cost of borrowing to the issuer and interest on official strips is assumed to accrue at the rate on the underlying security, but the cash flows change for the parties because of the issuance of zero-coupon bonds (see *External Debt Statistics: Guide for Compilers and Users* (2014), paragraphs 2.85-2.88 and *Handbook on Securities Statistics* (2014), paragraph 6.35).

Box 12.2a. Numerical Examples of Calculation of Interest Accrual on securities issued at par, at discount and at a premium

Example 1: A fixed interest rate bond issued at par

Issue price: 1,000; annual coupon payments: 100; original maturity: 5 years; redemption price: 1,000.

Implied interest rate, $r=10\%$

Table 12.2a Stocks and flows during the life of a bond issued at par

| | Nominal value | | | | | |
|--------------|---|--|--|---------------------------------|---|---|
| | a. before coupo n paym ent (= $a_{(t-1)+c}$) | b. after coupo n payme nt (= $a - d$) | c. accrue d interes t ^(c) (= $b_{(t-1)*r}$) | d. coup on paym ent | e. marke t value ^(b)) | f. reval - uatio n ^(a) |
| Start year 1 | 1000 | 1000 | | | 1000. 0 | |
| End year 1 | 1100 | 1000 | 100 | 100 | 969.0 | - 31.0 |
| End year 2 | 1100 | 1000 | 100 | 100 | 1025. 3 | 56.3 |
| End year 3 | 1100 | 1000 | 100 | 100 | 1054. 2 | 28.9 |
| End year 4 | 1100 | 1000 | 100 | 100 | 982.1 | - 72.1 |
| End year 5 | 1100 | 1000 | 100 | 100 | 1000. 0 | 17.9 |

Example 2: A fixed interest rate bond issued at discount with periodic payments

Issue price: 900; annual coupon payments: 73.6; discount payment at redemption; original maturity: 5 years; redemption price: 1,000

It is seen that 900 is the present value of future payments of 73.6 at the end of years 1 to 5 and a payment of 1000 in year 5, corresponding to approximately 10 percent rate of interest.

Implied interest rate, $r=10\%$

Table 12.2b Stocks and flows during the life of a bond issued at discount

| | Nominal value | | c. accrued interest ^(c) (= $b(t-1)*r$) | <i>d. coupon payment</i> | e. market value ^(b) | f. revaluation ^(a) |
|--------------|--|---|---|--------------------------|--------------------------------|-------------------------------|
| | a. before coupon payment (= $a_{(t-1)}+c$) | b. after coupon payment (= $a - d$) | | | | |
| Start year 1 | 900 | 900 | | | 900.0 | |
| End year 1 | 990.0 | 916.4 | 90.0 | 73.6 | 887.1 | -29.3 |
| End year 2 | 1,008.0 | 934.4 | 91.6 | 73.6 | 958.5 | 53.4 |
| End year 3 | 1,027.9 | 954.3 | 93.4 | 73.6 | 1006.5 | 28.2 |
| End year 4 | 1,049.7 | 976.1 | 95.4 | 73.6 | 958.6 | -69.7 |
| End year 5 | 1,073.7 | 1,000 | 97.6 | 73.6 | 1000.0 | 17.4 |

Example 3: A fixed interest rate bond issued at a premium with periodic payments

Issue price: 1,100; annual coupon payments: 126.4; discount payment at redemption; original maturity: 5 years; redemption price: 1,000

It is seen that 1100 is the present value of future payments of 126.4 at the end of years 1 to 5 plus a payment of 1000 in year 5 corresponding to approximately 10 percent rate of interest.

Implied interest rate, $r=10\%$

Table 12.2c Stocks and flows during the life of a bond issued at a premium

Nominal value

| | a. before coupon payment (= $a_{(t-1)}+c$) | b. after coupon payment (= $a - d$) | c. accrued interest ^(c) (= $b_{(t-1)}*r$) | <i>d. coupon payment</i> | e. market value ^(b) | f. reval- uation ^(a) |
|--------------|--|---|---|------------------------------|-----------------------------------|------------------------------------|
| Start year 1 | 1,100.0 | 1,100 | | | 1,100.0 | |
| End year 1 | 1,210.0 | 1,083.6 | 110.0 | 126.4 | 1,049.0 | -34.6 |
| End year 2 | 1,192.0 | 1,065.6 | 108.4 | 126.4 | 1,105.3 | 74.3 |
| End year 3 | 1,172.1 | 1,045.7 | 106.6 | 126.4 | 1,094.2 | 8.7 |
| End year 4 | 1,150.3 | 1,023.9 | 104.6 | 126.4 | 982.1 | -90.3 |
| End year 5 | 1,126.3 | 1,000 | 102.4 | 126.4 | 1,000.0 | 41.9 |

Notes:

(a) In each year the difference between the accrued interest and the coupon payment is capitalized (reinvested into the principal amount). Revaluations can be calculated as the difference between the current market value and the sum of the previous market value and capitalized interest. The revaluations over the lifetime of the bond sum to zero.

(b) Apart from the initial and final amounts, the market value amounts of the debt securities in the examples are chosen arbitrarily.

(c) Interest accrues for every period (daily, monthly, quarterly and annually). If the timing of the coupon payment differs from the reporting period end-date, then a further accrued interest would apply in each period up to the final payment.

Index-linked debt securities

12.59 As explained in paragraph [12.50], an indexation mechanism links the amount to be paid at maturity or coupon payments (or both) to indicators agreed by the parties. The values of the indicators are not known in advance. For debt securities with indexation of the amount to be paid at maturity, they may be known only at the time of redemption. As a result, coupon payments before redemption are uncertain and cannot be determined with certainty. For estimating interest accruals before the values of the reference indicators are

known, some proxy measures will have to be used. In this regard, it is useful to distinguish the following three arrangements:

- (a) indexation of coupon payments only with no indexation of amount to be paid at maturity,
- (b) indexation of the amount to be paid at maturity with no indexation of coupon payments, and
- (c) indexation of both the amount to be paid at maturity and coupon payments.

The principles described in paragraphs [12.60–12.66] for index-linked debt securities apply to all index-linked debt instruments.

12.60 When only coupon payments are index-linked, the full amount resulting from indexation is treated as interest accruing during the period covered by the coupon. It is most likely that by the time data are compiled for a reporting period, the date for the coupon payment would have been passed and hence the value of index is known. When the date for the coupon payment has not been passed, the movement in the index during that part of the reporting period covered by the coupon can be used to calculate the interest accrual.

12.61 When the amount to be paid at maturity is index-linked, the calculation of interest accruals becomes uncertain because the redemption value is unknown; in some cases the maturity time may be several years in the future. Two approaches can be followed to determine the interest accrual in each accounting period:

- (a) Interest accruing in an accounting period due to the indexation of the amount to be paid at maturity may be calculated as the change in the value of this amount outstanding between the end and beginning of the accounting period due to the movement in the relevant index. (See Box [12.3] for an example.)

- (b) Interest accruals may be determined by fixing the rate of accrual at the time of issue. Accordingly, interest is the difference between the issue price and the market expectation, at inception, of all payments that the debtor will have to make, which is recorded as accruing over the life of the instrument. This approach records as income the yield-to-maturity at issuance, which incorporates the results of the indexation that are foreseen at the moment the instrument was created. Any deviation of the underlying index from the originally expected path leads to holding gains or losses that will not normally cancel out over the life of the instrument. (See Box [12.4] for an example.)

12.62 Although the first approach (using the movement in the index) has the advantage of simplicity, interest includes all changes and fluctuations in the value of the amount to be paid at maturity in each accounting period due to the movement in the relevant index. If there is a large fluctuation in the index, this approach may yield negative interest in some periods even though market interest rates at the time of issue and current period may be positive. Also, fluctuations behave like holding gains and losses. The second approach (fixing the rate at the time of issue) avoids such problems, but the actual future cash flows may differ from the initially expected cash flows unless ex ante market expectations are exactly met. This means that interest for the life of the instrument may not be equal to the difference between the issue price and redemption value.

12.63 The first approach works well when a broad-based indexation of the amount to be paid at maturity is used (e.g., a consumer price index or nominal GDP) when such indexation is expected to change relatively smoothly over time. However, the first approach may give counter-intuitive results when the indexation of the amount to be paid at maturity combines motives for both interest income and holding gains (e.g., a narrow price index such as a commodity price, stock price, or gold price). Therefore, when indexation includes a

holding gain motive, typically indexation based on a single, narrowly defined item, the second approach is preferred; otherwise the first approach should be used for the measurement of interest accrual.

Box 12.3. Numerical Example of Calculation of Interest Accrual on an Index-Linked Bond—Broad-Based Index

A bond is issued on Jan 1, Year 1 at a price 1000 for five years, with no coupons, indexed to a broad price index. The index value at the beginning of the period is 100.

The index and bond values, with the derived interest and revaluations are as follows:

| | <u>Broad Price Index</u> | | | <u>Bond</u> |
|--------------|--------------------------|----------|-------------|-------------|
| | End of Period | Interest | Revaluation | Dec 31 |
| Start year 1 | 100 | | | 1000 |
| Year 1 | 107.0 | 70 | -12 | 1,058 |
| Year 2 | 113.0 | 60 | -17 | 1,101 |
| Year 3 | 129.0 | 160 | 58 | 1,319 |
| Year 4 | 148.0 | 190 | 10 | 1,519 |
| Year 5 | 140.3 | -77 | -39 | 1,403 |
| Year 1–5 | | 403 | 0 | |

Notes:

- Total interest over the five years (i.e., 403) is determined by the movement of the index (i.e., 40.3 percent increase).
- Since this is a bond, revaluations also arise because of changes in market conditions, such as changes in market interest rates, credit ratings, and expectations about the future path of the index. However, they are zero over the life of the bond when it is repaid at its indexed value.
- Negative values of interest can arise in the periods when the index declines.
- The corresponding entry to the interest accrued is an increase in debt securities in the financial account.

- Fluctuations in market interest rates cause changes in the value of the bond (shown in the final column), but the calculation of interest is unaffected.

12.64 Because debt instruments with both the amount to be paid at maturity and coupon payments indexed to foreign currency are treated as though they are denominated in that foreign currency, interest, other economic flows, and positions for these instruments should be calculated using the same principles that apply to foreign-currency-denominated instruments. Interest should accrue throughout the period using the foreign currency as the currency of denomination and converted into the domestic currency using mid-point market exchange rates. Similarly, the amount outstanding should be valued using the foreign currency as the unit of account with the end of period exchange rate used to determine the domestic currency value of the entire debt instrument (including any accrued interest) in the international investment position. Changes in market values of debt securities due to exchange rate movements and interest rate changes are treated as revaluations.

12.65 When both the amount to be paid at maturity and coupon payments are indexed to a broad-based reference item, interest accruals during an accounting period can be calculated by summing two elements: the amount resulting from the indexation of the coupon payment (as described in paragraph [12.60]) that is attributable to the accounting period, and the change in the value of the amount outstanding between the end and beginning of the accounting period arising from the movement in the relevant index (as described in paragraph [12.61(a)]). When both the amount to be paid at maturity and coupon payments are indexed to a narrow index that includes a holding gain motive, interest accruals for any accounting period can be determined by fixing the yield-to-maturity at issuance as explained in paragraph 12.61(b).

Debt securities with embedded derivatives

12.66 For debt securities with embedded derivatives, such as call, put, or equity conversion options, the accounting for accrued interest is the same as for securities that do not have such features. For all periods leading up to the exercise of the option, the interest accrual is unaffected by the presence of the option. When the embedded option is exercised, the securities are redeemed and accrual of interest ceases.

Box 12.4. Numerical Example of Calculation of Interest Accrual on an Index-Linked Bond—Narrowly Based Index

A bond is issued on Jan 1, Year 1 at a price 1000 for five years, with no coupons, indexed to a narrow price index. The index value at the beginning of the period is 100. (The numbers are the same as the example in Box 12.3, but the treatment differs because the narrow index treatment is applied in Box 12.4.) Market interest rates are 8 percent per annum at the time of issue.

The index and bond values, with the derived interest and revaluations are as follows:

| | Broad Price Index | | | Bond |
|--------------|-------------------|----------|-------------|--------|
| | End of Period | Interest | Revaluation | Dec 31 |
| Start year 1 | 100 | | | 1000 |
| Year 1 | 107.0 | 80 | -22 | 1,058 |
| Year 2 | 113.0 | 86 | -43 | 1,101 |
| Year 3 | 129.0 | 93 | 124 | 1,318 |
| Year 4 | 148.0 | 101 | 100 | 1,519 |
| Year 5 | 140.3 | 109 | -225 | 1,403 |
| Year 1–5 | | 469 | -66 | |

Notes:

- The total increase in value over the five years (i.e., $469 - 66 = 403$) is determined by the movement of the index (i.e., 40.3 percent increase).

- According to the debtor approach (see paragraph 12.52(a)), the interest in each period is fixed according to the interest rate at inception. The interest in Year 1 is 80 (8 percent of 1000), in Year 2 it is 86 (8 percent of 1000 + 80), in Year 3 it is 93 (8 percent of 1000 + 80 + 86), and so on.
- The revaluation for the whole life of the bond is due to the difference between the increase in the index and the compound increase that would have occurred at the market rate of interest. (Revaluations also arise for individual periods during the life of the bond because of changes in market conditions, such as changes in market interest rates, credit ratings, and expectations about the future path of the index.)
- Fluctuations in market interest rates cause changes in the value of the bond, but the calculation of interest is unaffected.

d. Fees on securities lending and gold loans

12.67 Securities lending without cash collateral consists of the delivery of securities for a given time period. (This is discussed further in paragraphs [7.58–7.61].) Usually the borrowers (e.g., brokers) subsequently on-sell the securities outright to other clients. The ability of the borrower to on-sell the securities reflects that legal ownership is transferred to the borrower, while the economic risks and rewards of ownership remain with the original owner. In return, the “lender” receives a fee from the “borrower” for the use of the security. Gold loans consist of the delivery of gold for a given time period. They may be associated with physical gold or (less frequently) unallocated gold accounts. As with securities lending, legal ownership of the gold is transferred (the temporary borrower may on-sell the gold to a third party), but the risks and benefits of changes in the gold price remain with the lender. Gold borrowers (usually market dealers or brokers, but also gold producers and industrial gold users) often use these transactions to cover their sales to third parties in periods of (temporary) gold shortage. A comparable fee is paid to the original owner for the use of the gold. The amount of the fee is determined by the value of the underlying asset and the duration of the reverse transaction. Warrants may also sometimes be lent.

12.68 Securities and monetary gold are financial instruments and thus the fees for securities lending without cash collateral and gold loans are payments for putting a financial instrument at the disposal of another institutional unit. Accordingly, fees on securities lending (equity securities as well as debt securities) and gold loans accrue to the security owner and are treated as interest (with the corresponding entry in other accounts receivable/payable; see paragraph [5.73]). As a simplifying convention, fees paid on loans of nonmonetary gold are also treated as interest. For securities lending, although, in some circumstances, the fee is payable to the custodian in the first instance (and used to defray custodial charges, in whole or in part), in principle, all of the fee is payable to the owner of the security who, in turn, is deemed to pay part or all of it to the custodian in a separate transaction. (Amounts accruing to custodians are included under custodial services, discussed under financial services in paragraphs [10.121 and 10.124].)

e. Investment income accrued while securities are under reverse transactions

12.69 The economic owner of securities continues to record dividends and the accrual of interest on the securities even when the legal ownership changes under a reverse transaction (see paragraph [7.58]) or a custodian has on-sold the securities to a third party (see paragraph [10.124]). If the reverse transaction covers the period when dividends or coupons are payable, the security taker is typically obliged to pass these amounts on to the security lender. Even if securities under a reverse transaction are on-sold by the security taker to a third party, the security taker is still obliged to compensate the amounts to the security lender. The payments are called “manufactured interest” and “manufactured dividends.”) Manufactured interest and dividends are recorded as negative credits/revenues for a security taker who has on-sold the securities. See also Annex 7, section C.

5. Investment income attributable to policyholders in insurance, standardized guarantees, and pension funds

Reference 2025 SNA Chapter 8: Earned income accounts, Section E.4.

12.77 *Investment income attributable to insurance policyholders consists of investment income receivable from the investment of insurance technical reserves, which is attributed to the policy holders. For an institutional unit operating a standardized guarantee scheme against fees, there may also be investment income earned on the reserves of the scheme and this should also be shown as being distributed to the units paying the fees. Investment income payable on pension entitlements is investment income received from the investment of assets accumulated for defined contribution schemes, and the unwinding of the discount of the entitlements for defined benefit schemes.*

12.78 The operations of insurance corporations, standardized guarantee schemes, and pension funds include charging premiums, paying claims, and managing and investing funds. However, the observed transactions do not always reflect the underlying economic relationships between the insurance corporations or pension funds and policyholders, and it is necessary to rearrange these operations so that the underlying economic behavior is reflected in the economic accounts. One such rearrangement is the imputation of investment income attributable to policyholders in insurance corporations, standardized guarantee schemes, and pension funds. The measurement of insurance and pension services is described in paragraphs [10.109–10.117].

12.79 Insurance corporations, standardized guarantees schemes, and pension funds hold technical reserves, provisions and entitlements to meet obligations arising from claims and entitlements. The definition and classification of these items are described in paragraphs [5.62–

5.63 and 7.63–7.68]. The technical reserves, provisions and entitlements represent a liability of the insurer, issuer of standardized guarantees, and pension fund, and a corresponding asset of the policyholders and beneficiaries. To meet their liabilities, the insurers, guarantors, and pension funds make investments in various assets, such as financial assets, land, or buildings. However, the investments by insurers, guarantors, and pension funds are not necessarily equal to the technical reserves and entitlements.

12.80 For nonlife insurance policies, the technical reserves represent prepayment of premiums and reserves against outstanding claims. Guarantors have technical provisions for calls under standardized guarantees. The investment income on these technical reserves is treated as income attributable to the policyholders

12.81 For life insurance, the insurers' liability equals the present value of expected claims from existing policyholders. It is common also for “bonuses” to be attributed to the policy holders each year. (See paragraph [A6c.33] for further information.). The bonuses declared to holders of life policies should be recorded as part of investment income receivable by the policyholders and are treated as premium supplements being paid back to the insurance corporations..



12.82 For defined contribution pension schemes, the investment income payable on pension entitlements is measured in the same way as for the investment income attributable to insurance policyholders (i.e., equal to the investment income on accumulated assets plus any income earned by renting land and buildings owned by the fund). For defined benefit pension schemes, because the value of entitlements is the present value of future payments, the investment income payable on pension entitlements is measured as the increase in benefits payable because the date when the entitlements become payable is closer. The amount of the increase is not affected by whether the pension scheme actually has sufficient funds to meet all the obligations nor by how it is funded (whether from investment income or holding gains, for

example). (In contrast, changes in model assumptions are recorded under other changes in volume—see paragraph [9.24].)

12.82a A pension sponsor (such as the employer) may be obliged to meet liabilities of a defined benefit scheme in case of shortfall. Imputed investment income on this shortfall is recorded as income from the pension manager to the pension fund, which would be negative in the case of an excess.

12.83 Investment income attributable to policyholders is retained by the insurance corporations, guarantors, and pension funds in practice. It is therefore treated as being paid back by the policyholders to the insurance corporations, guarantors, and pension funds in the form of premium supplements that are additional to actual premiums payable under the terms of the insurance and pension policies. The corresponding entries to the investment income attributable to insurance policyholders for nonlife insurance, including standardized guarantees, are called premium supplements and taken into account in deriving service charges and premiums less service charges. (See paragraphs [12.41–12.42] and Appendix [6c], Topical Summary—Insurance, Pension Schemes, and Standardized Guarantees.)

12.84 The total amount of investment income attributable to policyholders is allocated among policyholders. The allocation to policyholders could be made in proportion to actual premiums payable by them. Investment income payable by resident insurers, guarantors, and pension funds to nonresident policyholders can be estimated by multiplying the gross premiums earned from nonresidents by the ratio of investment income attributable to policyholders to gross premiums earned for all operations. To the extent that these ratios vary for different lines of business (reinsurance, marine, life, pension funds, standardized guarantees, etc.), the calculations should be made separately. Such investment income receivable by resident policyholders from nonresident insurers, guarantors, and pension funds is not readily observable. Ratios of investment income attributable to policyholders to premiums that are observed in other similar cases could be used to calculate investment income receivable.

6. Rent

Reference:

2025 *SNA*, Chapter 8, Earned Income Accounts, Section E.5

12.85 *Rent covers income receivable by the owner of nonproduced nonfinancial assets (the lessor or landlord) for putting the assets at the disposal of another institutional unit (a lessee or tenant) for use in production. The terms under which rent is payable are often expressed in a (resource) lease. A natural resource lease is an agreement whereby the legal owner of a natural resource makes it available to a lessee in return for a regular payment recorded as rent.*

12.86 Examples of rent include amounts payable for the use of land, the extraction of mineral deposits and other subsoil assets, and for fishing, forestry, and grazing rights. The regular payments made by the lessees of natural resources such as subsoil assets are often described as royalties, but they are classified as rents. Payments or receipts by government of rent on land without buildings (e.g., for military bases) should be shown as rent, not as government goods and services n.i.e. If a single payment covers both the return on land and structures on it and there is no objective basis on which to split the payment for the use of land and structures, the whole amount should be treated as rent when the value of land is believed to exceed the value of structures, and as purchase of services (rental) otherwise. Other types of rent relate to, for example, payments for rights to use marketing assets, when the income component (rent) can be separated from the service component (see also paragraph [10.140]) and payments to households giving explicit consent to monitor their behavioral patterns in the form of observable phenomena. (*Observable phenomena related to data is a term referring to a fact or situation whose characteristics or attributes may be recorded for the collection of data.*)

12.87 Usually, the entity using land or natural resources is a resident institutional unit. In relation to the use of natural resources, there are instances where a split asset approach is followed as discussed in 2025 SNA Chapter 27, and a notional unit would need to be created if there is not already a resident institutional unit. However, if the user is a nonresident and does not have ownership of the resource, then a cross-border transaction on rent arises. For example, a forestry or fishing operation that pays for temporary access to naturally growing fish or timber in another economic territory gives rise to rent in the external accounts. It is also possible that other natural resources adjoining a border could be extracted from a base on the other side of the border, thus giving rise to rent. Payments for overflight rights are also rent, unless they relate primarily to air traffic control, in which case they would be other transport services. Rent arrangements can be contrasted with:

- (a) outright ownership of the resources concerned, which would be recorded as an international transaction in a natural resource (see paragraph [13.9]) or, more likely, give rise to a notional direct investment enterprise that owns the resource (paragraphs [4.34–4.40]);
- (b) when the right to use an asset amounts to an economic asset but not outright ownership of the underlying asset, the purchase and sale are classified under contracts, leases, and licenses (e.g., a right to use a natural resource for 10 years, such as a spectrum license; see paragraph [13.11]); or
- (c) rentals, which represent charges for the use of fixed assets, such as houses and machinery (see paragraphs [10.153–10.157] on rentals arising from operating leases).

12.88 Notional direct investment enterprises created for holding land and leases on land for long periods will normally generate rent (or travel or operational leasing services if there is a building on the land). Notional units are described in paragraphs [4.34–4.40]. When the land or buildings are used by the owners (who are nonresidents) of the notional unit, an

imputation for rent (in the case of use of land) or travel services (e.g., in territories that had a large number of vacation homes owned by nonresidents) or operational leasing (if nonresident enterprises own premises for their own use) would be necessary. These imputations are recorded under relevant categories of the current account. The income arising from the notional direct investment enterprise is recorded under direct investment income. For example, if the vacation home is rented, the notional unit receives the payment for accommodation and generates net earnings that are considered withdrawals from income of quasi-corporations, generated by the provision of accommodation services.

12.89 Rent is recorded on an accrual basis; that is, rent is treated as accruing continuously to the owner throughout the period of the contract agreed between the owner and the user. The rent recorded for a particular accounting period is, therefore, equal to the value of the accumulated rent payable over that period of time, as distinct from the amount of rent due to be paid during that period or the rent actually paid. An up-front rent payment covering several periods gives rise to a financial asset of the lessee and liability of the lessor, classified under accounts receivable/payable. Similarly, a payment after the rent period(s) gives rise to other accounts receivable/payable.

12.90 If a lessee subleases a nonproduced nonfinancial asset, the income from the subleasing should be classified as rent, as should the income payable to the owner of the nonproduced nonfinancial asset by the owner of the lease.

12.90a If significant, payments for the use of nonproduced nonfinancial assets other than natural capital can be shown separately as a supplementary sub-item of rent.

7. Taxes on production and on imports, and subsidies

12.91 In the SNA, the term taxes on production and on imports consists of “taxes on products” and “other taxes on production”, and subsidies consists of “subsidies on products” and “other subsidies on production”. Taxes on production and on imports and subsidies are included in the earned income account. (See paragraphs [10.180–10.181 and 13.30] for distinction between taxes and services.) Taxes on income and wealth are included in the transfer income account (see paragraphs [12.28–12.31] for taxes on income and wealth). Cross-border taxes on production and on imports and subsidies are normally not significant except perhaps in economic unions. They arise if an international or regional organization levies its own taxes or pays subsidies (which may also be done through national governments). They may also arise when economic activity by nonresidents (such as short-term construction or installation projects) is insufficient to constitute a branch. Although taxes on products may be levied at various stages (production, distribution, or use), they are included in the prices of goods and services. Therefore, for purchasers, the prices paid include relevant taxes on products, while for governments such taxes are considered earned income. Taxes on production and on imports may include payments of stability fees levied by governments on financial institutions to assist ailing financial institutions, sometimes called bank levies. Payments to stability schemes should be classified as either a tax or as a payment for an insurance-type of transaction. The treatment in the balance of payments should be consistent with the national accounts treatment.

12.92 Taxes and subsidies on products and production should be recorded in the earned income account to maintain the conceptual consistency with *SNA*. The *2025 SNA* distinguishes between

- (a) Taxes on products, which are payable per unit of a good or service. Examples include value-added tax, import duties, export taxes, and excise; and
- (b) Other taxes on production. Examples include payroll taxes, recurrent taxes on buildings and land, and business licenses.

The same distinction is made for subsidies. As mentioned in paragraph [12.4], the balance on the earned income account makes up the difference between GDP and GNI. Subsidies are shown separately from taxes, rather than being deducted from taxes.

12.93 In some cases, an exporter of a good contractually agrees to pay import duties. In such cases, the duties are outside the scope of the distribution of earned income in the external accounts. This treatment is adopted because the duties arise from the process of importation, and so they are an obligation of the importer. They are, therefore, treated as payable by the importer, and are resident-to-resident transactions. The amount of import duties paid by the exporter, therefore, is not included in the FOB value of the goods. Similarly, if an importer agrees to pay export taxes, the tax is still an obligation of the exporter. The amount of the export tax paid by the importer, therefore, is included in the FOB value of the goods and rerouted through the exporter. (See also paragraph 10.34.) (This treatment is the same as applies to arrangements to pay freight and insurance services.)

12.94 In some circumstances, a duty or other tax may be imposed by the customs authorities without ownership being acquired by a resident of that territory. Examples may include goods to be processed, repaired, or stored, or for use by visitors. In such cases, when customs duties are payable by nonresidents, the duties are recorded as taxes on products payable by nonresidents.

C. Investment Income and Functional Categories

12.95 This section deals with investment income that is included under each functional category of financial assets and liabilities. It also discusses specific issues related to investment income for a functional asset category. A functional asset category includes different types of financial instruments that serve the same function, and hence a functional category can include different types of investment income. Financial derivatives and employee stock options do not give rise to investment income.

1. Direct investment income

12.96 Direct investment income includes all investment income arising from direct investment positions between resident and nonresident institutional units. A numerical example of the calculation of reinvested earnings is given in [Box 12.5]. As noted in paragraph [6.28], debt between selected affiliated financial intermediaries is not included in direct investment, so the corresponding income on those instruments is also classified as portfolio or other investment income. Rare cases of other earned income, such as remuneration of employees and rent between direct investors and direct investment enterprises, are not included under direct investment income.

12.97 Direct investment relationships are defined in paragraphs [6.8–6.24]. Dividends, withdrawals from income of quasi-corporations, and interest can apply for any of these types of direct investment relationships. Reinvested earnings are attributed to direct investors only when equity participation by the direct investor meets the 10 percent threshold. Three types of direct investment relationships and associated investment income flows can be distinguished:

- (a) Direct investors' investment in direct investment enterprises. This category includes investment income flows (distributed earnings, reinvested earnings, and interest) between the direct investor and its direct investment enterprises (whether in an immediate relationship or not).
- (b) Reverse investment (defined in paragraph [6.40]). This type of relationship covers investment income flows on liabilities of direct investors to their direct investment enterprises and on claims of direct investment enterprises on their direct investors. This category includes distributed earnings and interest. There are no reinvested earnings on reverse equity because the 10 percent threshold has not been met.
- (c) Between fellow enterprises (see paragraph [6.17(c)]). This covers investment income flows between all fellow enterprises that belong to the same direct investment group. This category includes distributed earnings and interest. There are no reinvested earnings between fellows because the 10 percent threshold has not been met.

12.98 Investment income associated with various types of financial instruments is discussed in Section B above. Direct investment income should be presented by the type of income (for both income receivable on holdings of direct investment external assets and income payable on external direct investment liability positions) as shown in Table [12.2]. The table also shows memorandum items and supplementary information showing types of direct investment income by three types of direct investment relationship.⁵ Interest can be broken down further by type of financial instruments. The presentation of direct investment income as shown in the memorandum and supplementary items of Table 12.2 expands the analytical value of the data for detailed analysis of direct investment relationships, if the second or third categories are significant.

⁵Note that the memorandum items in Table 12.2 refer to the position to which the income flows relate, so the heading "direct investor in direct investment enterprises" refers to investment income payable to a direct investor by his or her direct investment enterprises.

Box 12.5. Numerical Example of Calculation of Reinvested Earnings of a Direct Investment Enterprise

Profit and Loss Statement of Enterprise A

Nonresident direct investors own 50 percent of the equity of Enterprise A.

| Revenue: | | |
|----------|---|--------|
| 1. | Sales of finished goods | 20,000 |
| 1a. | + increase in inventories of finished goods | 500 |
| 2. | Transport services provided | 3,000 |
| 3. | Repair services | 6,000 |
| 4. | Dividends | 3,000 |
| 5. | Interest on bonds | 1,000 |
| 6. | Profit on sale of property | 1,000 |
| 7. | Total revenue (1 through 6) | 34,500 |
| Expenses | | |
| 8. | Raw materials purchased | 12,000 |
| 8a | – increase in inventories of materials | 2,000 |
| 9. | Salaries and wages | 5,000 |
| 10. | Office rental | 500 |
| 11. | Travel of employees | 2,000 |
| 12. | Fuel, electricity, other costs | 500 |
| 13. | Depreciation | 1,000 |
| 14. | Interest on loans | 1,000 |
| 15. | Bad debt provisions | 2,000 |
| 16. | Total expenses (8 through 15) | 22,000 |
| 17. | Net income (before taxes) | 12,500 |
| 18. | Taxes on income | 4,000 |
| 19. | Net income (after taxes) | 8,500 |
| 20. | Dividends payable | 5,000 |

Reinvested earnings can be derived by:

(a) Adjusting net income after taxes:

Net income after taxes (line 19 = 8,500)

– revenue not part of output, earned income or transfer income (namely, holding gains, line 6 = 1,000)

+ expenses not being a transaction (namely, bad debt provisions, line 15 = 2,000)

= 9,500, multiplied by 0.5

= 4,750

– dividend payable to direct investors (5000 multiplied by 0.5 = 2,500)

= 2,250

(b) From the national accounting relationships

First calculate entrepreneurial income:

Operating revenue (line 1+line 1a + line 2 + line 3; which gives 29,500);

– operating expenses; (line 8-line8a + line 9 +line 10 + line 11 + line 12; which gives 18,00)

– depreciation (line 13, which gives 1,000) (Assumes business accounts depreciation is an acceptable approximation to national accounts depreciation. Adjustments may be possible if it is not.)

+ property income receivable (line 4 + line 5, which gives 4,000);

– property income payable (line 14 ; which gives 1,000)

=13,500 (entrepreneurial income)

Next calculate distributable income:

Entrepreneurial income (13,500)

+ current transfers receivable (none)

-current transfers payable (line 19 = 4,000)

=9,500 (distributable income)

Finally calculate reinvested earnings on direct investment:

Distributable income multiplied by the direct investor's share in the equity of the enterprise

9,500 multiplied by 0.5 = 4,750

- direct investor's share of dividends (=line 20 multiplied by 0.5 = 2,500)

=2,250

In practice, data for these calculations may not always be available monthly or quarterly, or may not be available for the most recent period(s). As a result, it may be necessary to derive some items from partial data or by methods, such as extrapolation, ratios, and models.

12.98a Direct investment income can be further classified by domestic institutional sectors (see Chapter 4, Economic Territory, Units, Institutional Sectors, and Residence; Section D, Institutional Sectors) for direct investors abroad and for direct investment enterprises in the reporting economy. Direct investment income by institutional sector and

other supplementary disaggregations, such as by ownership and by size can provide analytically useful information on the types of enterprise and the main partner economies involved in these flows (see also Chapter 16, Section [2]).

Transfer pricing

12.101 Transfer pricing at values that differ significantly from arm's length prices is usually associated with shifting resources between related enterprises, so it relates to direct investment income measures. Transfer pricing may be motivated by income distribution, equity buildups or withdrawals, or to shift income to an affiliate in a lower tax economy. Examples may be the provision of goods and services without explicitly charging, or at understated or overstated values. Where distorted transfer pricing is identified and quantified with a high degree of certainty, the relevant entry could be adjusted to an arm's length value (see also paragraphs 3.77–3.78). The adjustments need to be made consistently in the accounts of each of the economies involved and compilers need to cooperate and exchange information in order to avoid asymmetrical recordings of bilateral data. In addition to the adjustment to the flow itself, there should be a corresponding entry, as stated below:

| |
|-----|
| 12. |
|-----|

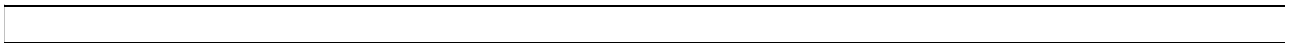


Table 12.2. Breakdown of Direct Investment Income, showing memorandum (m.) and supplementary (s.) items

| | Credits/ Revenues | Debits/Expenditures |
|--|----------------------|---------------------|
| Direct investment income | | |
| Income on equity | | |
| (m.) of which reinvested earnings | | |
| Interest and similar returns | | |
| <i>memorandum and supplementary items</i> | | |
| Direct investment income | | |
| (m.) Direct investor in direct investment enterprises | | |
| (m.) Direct investment enterprises in direct investor (reverse inv.) | | |
| (m.) Between fellow enterprises | | |
| (s.) if ultimate controlling parent is resident | | |
| (s.) if ultimate controlling parent is nonresident | | |
| (s.) if ultimate controlling parent is unknown | | |
| Note: This table is expository; for standard components, see Appendix 9. | | |

- (a) if a direct investment enterprise is overinvoiced on a good or service provided by the direct investor or
- (b) if a direct investor is underinvoiced on a good or service provided by the direct investment enterprise,

then the transfer pricing acts as a hidden dividend from the direct investment enterprise, so dividends should be increased by the difference between the market value of the goods and services and the prices actually charged:

- (a) if a direct investment enterprise is underinvoiced on a good or service provided by the direct investor or
- (b) if a direct investor is overinvoiced on a good or service provided by the direct investment enterprise,

then the transfer pricing acts as a hidden investment in the direct investment enterprise, so direct investment equity flows should be increased by the difference between the market value of the goods and services and the prices actually charged.

| Table 12.3. Detailed Breakdown of Other Investment Income | |
|--|---|
| | Credits/ Revenues Debits/ Expenditures |
| Other investment income | |
| Income on equity and investment fund shares | |
| Income on equity other than investment fund shares | |
| Dividends and withdrawals from income of quasi-corporations | |
| Income on investment fund shares | |
| Dividends | |
| Reinvested earnings | |
| Interest and similar returns | |
| Deposits | |
| Loans | |
| Similar instruments in the case of Islamic finance | |
| Trade credit and advances | |
| Other accounts receivable and payable | |
| SDR allocations | n.a. |

| |
|--|
| <p>Nonmonetary gold loans</p> <p>Investment income attributable to policyholders in insurance, pension Funds, and standardized guarantee schemes</p> |
| <p>Note: This table is expository; for standard components, see [appendix 9].</p> |

12.102 The adjustments for transfer pricing have implications for direct investment income and for data of the counterpart economy. It is, therefore, useful to exchange information to the extent possible with counterpart economies in order to avoid asymmetrical recordings.

2. Portfolio investment income

12.103 Portfolio investment income includes income flows between residents and nonresidents arising from positions in equity and debt securities other than those classified under direct investment or reserve assets. Financial instruments covered in portfolio investment are described in paragraphs [6.54–6.57].

12.104 Two types of portfolio investment income are distinguished at the first level, namely, income on equity securities and investment fund shares, and income on debt securities. The income on investment fund shares includes both dividends and reinvested earnings. Income on equity securities other than investment fund shares includes only distributed earnings (dividends). Interest is further classified by types of debt security and by maturity. Such a detailed classification of portfolio investment income ensures consistency with both instrument and functional classifications of financial assets and liabilities.

12.105 Portfolio investment income can be further classified by domestic institutional sectors for owners of securities as well as issuers of securities. A variety of other

supplementary disaggregations by foreign sector, currency of denomination, and so forth may be desirable for specific analytical purposes.

3. Other investment income

12.106 Other investment income covers flows between resident and nonresident institutional units in regard to interest on deposits, loans, trade credit and advances, and other accounts receivable/payable; income on equity and investment fund shares that are not classified in any other functional categories; and investment income attributable to policyholders in insurance, standardized guarantees, and pension funds. Interest payable on SDR allocations is also recorded under other investment income. Fees for nonmonetary gold loans should also be included in interest under other investment income (see paragraph [12.68]). Table [12.3] shows various types of other investment income and associated financial instruments.

12.107 Other investment income on equity excludes income on direct investment equity and portfolio investment in equity securities. Equity participation in some incorporated or unincorporated enterprises (such as partnership or joint ventures) does not qualify either as direct investment (because the equity participation is below the 10 percent threshold) or as portfolio investment (because they are not equity securities). Such equity participation is classified under other investment (see also paragraphs [5.26 and 6.62]) and any income distributed to the owners should be classified in other investment income. Similarly, some investment funds may be organized by and limited to a small number of members whose investment in the investment fund is not negotiable and may not meet the definition of portfolio investment. Both distributed and reinvested earnings on such investment fund shares are classified under other investment income. Income on equity in international organizations that is not tradable is also classified under other investment income on equity.

12.108 Other investment income should be further classified by type of financial instruments. It can also be classified by the domestic institutional sectors (for both income receivable on holdings of external assets and income payable on external liability positions).

4. Income on reserve assets

12.109 Data on income on reserve assets is useful for studying rates of return on reserves, and for ensuring that rates of return on other categories exclude reserves. Investment income on reserve assets includes income on equity and investment fund shares, and interest. Fees on security lending and monetary gold loans (as discussed in paragraph [12.67]) and interest on unallocated gold accounts (as discussed in paragraph [6.80]) are also included under interest on reserve assets. Income on equity and investment fund shares can be further classified into dividends on equity securities and income attributable to investment fund shareholders. The latter includes both distributed and reinvested earnings. Interest receivable can also be further classified by type of financial instruments. If not available for publication, income from reserve assets should be included in other investment–interest.

12.110 Interest on SDR holdings is shown on a gross basis under income on reserve assets. That is, the value of interest payable on SDR allocations is not deducted. (Interest payable on SDR allocations is shown as income under other investment liabilities, as shown in Table 12.3.)

Chapter 13. Transfer Income Account[¶]

(Update to *BPM6* Chapter 12)

Chapter 13 Transfer Income Account

A. Overview of the Transfer Income Account

Reference:

[*SNA 2025*, Chapter 9, Transfer Income Accounts.]

13.1 *The transfer income account records current transfers between residents and nonresidents. Various types of current transfers are recorded in this account to show their role in the process of income distribution between the economies. Transfers may be made in cash or in kind. Capital transfers are shown in the capital account (see paragraphs [13.19–13.34 in *BPM7* Ch 14]).*

13.2 Whereas earned income affects national income (see paragraph [11.4 in *BPM7* Ch 12] for the definition of gross national income), transfer income, together with earned income, affects gross national disposable income. Capital transfers do not affect disposable income and, hence, are recorded in the capital account.

13.3 The balance on the transfer income account presents total credits/revenues less total debits/expenditures. In addition, the balance of the sum of

[¶] Note: This Chapter is concurrently undergoing [Global Consultation](#).

all current account transactions can also be shown at the end of this account because it is the last account in the sequence of current accounts. The balance on all current accounts is called the current account balance, an important economic aggregate in analyzing external imbalance. The current account balance also links to the national accounts as it is equal to the gross saving less gross capital formation (or net savings plus depletion less net capital formation) for the economy (see paragraphs [14.4–14.5 in *BPM7* Ch [19]]).

13.4 The structure of the transfer income account is shown in Table [13.1]. Current transfers can be further classified by institutional sectors receiving or providing the transfers. In some cases, compilers may be interested in compiling data classified by sector of provider for credits/revenues and sector of recipient for debits/expenditures. For economies that are major recipients of assistance, it would be desirable to show current and capital transfers with consistent classifications to allow them to be compared and aggregated.

| Table 13.1. Overview of the Transfer Income Account | | |
|--|----------------------|-------------------------|
| | Credits/ Revenues | Debits/ Expenditures |
| <i>Balance on goods, services, and earned income</i> | | |
| Personal transfers | | |
| Current taxes on income, wealth, etc. | | |
| Social contributions | | |
| Social benefits | | |
| Nonlife insurance premiums less service charges | | |
| Nonlife insurance claims | | |
| Current international cooperation | | |
| Miscellaneous current transfers | | |
| <i>Total current transfers credits/revenues and debits/expenditures</i> | | |
| <i>Balance on transfer income</i> | | |
| Adjustment for change in pension entitlements | | |
| <i>Current account balance</i> | | |
| <i>Current account balance (excluding reinvested earnings)</i> | | |
| Note: This table is expository; for Standard Components, see [Annex 14]. | | |

B. Concepts and Coverage

13.5 In describing the content of the transfer income account, two important distinctions are made: (a) transfers are distinguished from other types of

transactions (see paragraphs [13.6–13.11]) and (b) current transfers are distinguished from capital transfers (see paragraphs [13.12–13.15]).

1. Transactions: exchanges and transfers

13.6 As explained in paragraph [3.13], every transaction is either an exchange or a transfer. An exchange involves a provision of something of economic value in return for a corresponding item of economic value.

13.7 *A transfer is a transaction in which one institutional unit provides a good, service or asset to another unit without receiving from the latter any good, service or asset in return as a direct counterpart.* Transfers can also arise where the value provided in return for an item is well below the value of the item. The accounting system in the external sector statistics requires that each party to a transaction record two entries (see paragraphs [3.26–3.31] for the description of the accounting system). When something of economic value (e.g., goods, services, or an asset) is provided without a corresponding return of an item of economic value, the corresponding entry is made as a transfer. A cash transfer consists of the payment of currency or transferable deposit by one institutional unit to another without anything supplied in return. A transfer in kind consists of either the transfer of ownership of a good or asset, other than cash, or the provision of a service, again without any corresponding return of an item of economic value. A transfer is classified as a current or capital transfer (see paragraphs [13.12–13.15]).

13.8 A unit making a transfer receives no specific quantifiable benefit in return that can be recorded as part of the same transaction. Nevertheless, certain transfers (e.g., nonlife insurance premiums less service charges) may entitle the unit making the payment to some contingent future benefits. Taxes are usually used to provide certain collective and individual services that the taxpayers may be able to consume.

Even in the context of taxes payable by residents, such benefits are generally uncertain or not quantifiable, and hence items such as nonlife insurance premiums less service charges, and taxes other than those on products and production are treated as transfers. Taxes on products and production (that is, “taxes on production and on imports” in the SNA) are, however, treated as earned income. (See paragraphs [11.91–11.94 in *BPM7* Ch 12].)

13.9 The borderline between transfers and exchanges may, in some cases, be unclear. One such case, the distinction between taxes and charges for government services, is described in paragraphs [13.30]. Another case is the distinction between personal transfers and remuneration of employees when individuals go abroad for employment. The distinction between the recording of one or the other of these transactions is based on the nature of the transaction and how long the individuals stay in the economic territories where they are working, that is, whether they are considered residents of the economies where they are working. Similarly, a case of distinction between financial transactions and personal transfers is described in paragraph [13.24].

13.10 A nonprofit institution serving households (NPISH, as defined in paragraph [4.100]) may be a direct investor in a corporation. However, flows between two NPISHs are generally transfers, rather than investment, because it is considered that flows in these cases are seldom driven by commercial considerations.

13.11 Transfers do not generally arise between commercial entities. For example, provision of goods and services without an explicit charge or at understated or overstated value between institutional units in a direct investment relationship does not represent a transfer. In this instance, the corresponding entry is a transaction in direct investment equity (see paragraphs [11.101–11.102 in *BPM7*

Ch 12]). However, nonlife insurance premiums less service charges, and nonlife insurance claims are transfers that may occur between commercial entities.

Likewise, a commercial entity may be involved in the provision of current or capital transfer to another commercial entity as a compensation for damages to properties or other losses. An enterprise may also make voluntary transfers to NPISHs and other entities in the form of charitable donations.

2. Distinction between current and capital transfers

13.12 Transfers may be either current or capital. To avoid duplication, the distinction between current and capital transfers is discussed primarily in this chapter rather than in Chapter 14, Capital Account. To distinguish current transfers from capital transfers, it is preferable to focus on the special characteristics of capital transfers.

13.13 *Capital transfers are unrequited transactions, either in cash or in-kind, in which the ownership of an asset (other than cash or inventories) changes from one party to another; or that oblige one or both parties to acquire or dispose of an asset (other than cash or inventories); or where a liability is forgiven by the creditor.*

A capital transfer results in a commensurate change in the stocks of assets and/or liabilities of one or both parties to the transaction without affecting the saving of either party. Capital transfers are typically large and infrequent, but cannot be defined in terms of size or frequency. A transfer in kind without a charge is a capital transfer when it consists of (a) the transfer of ownership of a nonfinancial asset (other than inventories, i.e., fixed assets, valuables, or nonproduced assets) or (b) the forgiveness of a liability by a creditor or assumption of a liability when no

corresponding value is received in return. However, capital equipment provided by a direct investor to its direct investment enterprise without a charge is not a capital transfer, but involves a transaction in direct investment equity. A transfer of cash that is linked to, or conditional on, the acquisition or disposal of a fixed asset by one or both parties to the transaction (e.g., an investment grant) is a capital transfer. Major nonrecurrent payments in compensation for accumulated losses, extensive damages or serious injuries not covered by insurance policies are also capital transfers.

13.14 *Current transfers are unrequited transactions between two parties where one party provides a good, service or cash to the other party, with no expectation of anything of economic value in exchange. Unlike capital transfers, they do not oblige one or both parties to acquire, or dispose of, an asset (other than cash or inventories). Current transfers directly affect the level of disposable income and influence the consumption of goods or services. That is, current transfers reduce the income and consumption possibilities of the donor and increase the income and consumption possibilities of the recipient. For example, social benefits and food aid are current transfers.*

13.15 It is possible that some cash transfers may be regarded as capital by one party to the transaction and as current by the other party. A large economy that regularly makes investment grants in cash to a number of smaller economies may regard the outlays as current, even though they may be specifically intended to finance the acquisition of assets. So that a donor and a recipient do not treat the same transaction differently, a transfer should be classified as capital for both parties

even if it involves the acquisition or disposal of an asset, or assets, by only one of the parties. When there is doubt about whether a transfer should be treated as current or capital, it should be treated as a current transfer. The treatment of nonlife insurance claims as current or capital is discussed in paragraphs [13.44–13.45].

3. Recording and valuation of transfers

13.16 Although no good, service, or asset is received in return from the counterpart, the recording of a transfer nevertheless must give rise to two entries for each party to the transaction. For a transfer in cash, the donor records a decrease in currency and deposits and a transfer payable (i.e., a debit/expenditure entry in the transfer income account); the recipient records an increase in currency and deposits and a transfer receivable (i.e., a credit/revenue entry in the transfer income account). For a provision of goods or services in kind without a charge, the donor records an export of goods or services and a transfer payable; the recipient records an import of goods or services and a transfer receivable. When a liability is forgiven, the creditor and debtor extinguish the financial asset and liability, respectively, with the corresponding entries recorded as transfers.

13.17 In general, the time of recording of transfers is determined by the time of the change of economic ownership of the resources (such as goods, services, financial assets) that are corresponding entries to transfers. Determining the time of recording for grants and other voluntary transfers can be complex because there is a wide variety of eligibility conditions that have various legal powers. In some cases, a potential transfer recipient has a legal claim when certain conditions have been satisfied, such as the prior incurrence of expenses for a specific purpose or the passage of legislation. These transfers are recorded when all requirements and conditions are satisfied. The corresponding entry to voluntary and compulsory

transfers that are accrued but not yet paid is other accounts receivable or other accounts payable. In cases where the transfer recipient never has a claim on the donor, the transfer should be attributed to the time at which the cash payment is made, the asset conveyed, or liability forgiven.

13.18 Taxes and other compulsory transfers to government units should be recorded when the activities, transactions, or other events occur that create the government's claim to the taxes or other payments. The time of recording of taxes is the time at which the tax liability arises. Accordingly, the amount of taxes is determined by the amount due for payment as evidenced by tax assessments, declarations, or other instruments, such as sales invoices or customs declarations, that create liabilities in the form of obligations to pay on the part of taxpayers. If data on taxes are on a cash basis, adjustments should be made for large differences to approximate the accrual basis of recording. If a tax amnesty establishes tax obligations for previously undisclosed activities, transactions or other events, then the tax revenue should be recorded when the tax obligation is established (recording in the earned income account or in the transfer income account would depend on the nature of the tax for which the amnesty is granted). Some compulsory transfers, such as fines, penalties, and property forfeitures, are determined at a specific time. These transfers are recorded on an accrual basis when the receiving unit has an unconditional legal claim to the funds or property, which may be when a court provides judgment or an administrative ruling is made. If such judgement or ruling is subject to further appeal, then the time of recording is when the appeal is resolved.

13.19 Because a transfer is the corresponding entry to an actual resource flow or a forgiven liability, the value of the transfer equals the value of the corresponding flow. Generally, transfers in kind give rise to valuation difficulties for the actual resource flow and, accordingly, also the corresponding transfer entries.

The principles for the valuation of in-kind transactions are described in paragraph [3.72].

C. Types of Current Transfers

13.20 The external accounts classify the following types of current transfers:

Personal transfers

Other current transfers

- (a) current taxes on income, wealth, etc.,
- (b) social contributions,
- (c) social benefits,
- (d) nonlife insurance premiums less service charges,
- (e) nonlife insurance claims,
- (f) current international cooperation, and
- (g) miscellaneous current transfers.

These categories of current transfers are described in paragraphs [13.21–13.58] in the context of the external accounts. The recording of current transfers in cash and of current transfers in kind is illustrated in Box 13.1. (If the transfers illustrated in Box 13.1 were capital transfers, they would be recorded in the capital account instead of the transfer income account.)

Box 13.1. Examples of recording of transfers

Non-government sectors in the examples refer to financial corporations, nonfinancial corporations, households, and NPISHs.

Example 1, a current transfer in cash:

A government social security fund in Economy A makes a payment of 10 in cash to a resident in Economy B.

Although no good or service is received as a direct consequence of the transfer, the transfer must give rise to two entries in the accounts of each economy.

The recording in Economy A would be:

| | |
|---|--|
| Transfer income account, General Government, Social benefits | 10 debit/expenditure |
| Financial account | -10 net acquisition of financial assets |

The recording in Economy B would be:

| | |
|---|---|
| Transfer income account, non-government sectors, Social benefits | 10 credit/revenue |
| Financial account | 10 net acquisition of financial assets |

Example 2, a current transfer in kind:

An enterprise producing medicines in Economy A donates some of its output (valued at 75) free of charge to a non-governmental organization resident in Economy B.

The transfer should give rise to two entries in the accounts of each economy.

The recording in Economy A would be:

| | |
|---|------------------|
| Transfer income account, non-government sectors, Miscellaneous current transfers | 75 debit/expendi |
|---|------------------|

| | |
|---|-----------------------------------|
| Goods account | 75 exports (credit/revenue) |
| The recording in Economy B would be: | |
| Transfer income account, non-government sectors, Miscellaneous current transfers | 75 credit/revenue |
| Goods account | 75 imports (debit/expenditure) |

1. Personal transfers

Reference:

IMF, 2009, *International Transactions in Remittances: Guide for Compilers and Users*.

13.21 *Personal transfers consist of all current transfers in cash or in kind made or received by resident households to or from nonresident households.* Personal transfers thus include all current transfers between resident and nonresident individuals, independent of:

- (a) the source of income of the sender (irrespective of whether the sender receives income from labor, entrepreneurial or property income, social benefits, and any other types of transfers; or disposes assets); and
- (b) the relationship between the households (irrespective of whether they are related or unrelated individuals).

By convention, current transfers between households with regard to lotteries and other gambling are included under personal transfers (discussed in paragraph [13.26]).

13.23 The connection to the residence status of the person concerned is important in determining whether a personal transfer is involved. For example, in the case of workers, personal transfers include only those transfers abroad made by workers who are residents of the economy in which they are employed. Resources may be sent abroad by residents of an economy for the purpose of financing other residents of the same economy who are staying abroad (such as those sent by parents to children who are studying in other territories). These transactions should not be recorded as current transfers in the balance of payments because the parties are residents of the same economy. The expenses abroad constitute a purchase of education services in the case of students. Expenditures incurred abroad by residents staying for less than one year in foreign economic territories are generally recorded as travel (see paragraphs [10.86–10.100]).

13.24 Funds sent abroad by individuals who are resident in the economy in which they are employed, self-employed, or operating a business, for the purpose of making a deposit in his or her own account with a bank located abroad, represent a financial investment, which is recorded in the financial account, rather than as a personal transfer. But any withdrawals to provide resources to a relative or another person (without a *quid pro quo*) should be recorded as a personal transfer. The situation of joint accounts can arise with workers resident abroad who have joint bank accounts with relatives in their home countries. The treatment of such joint accounts is discussed in paragraph [4.145]. If the joint account emigrant workers hold in their home country is freely usable by its holders in the home country, the account may be considered to be held by residents in the home economy (liability to residents). In such a case, the deposits made to the account by the nonresident should be shown as funded by a

transfer from abroad, withdrawals from the account by the nonresident would be shown as a transfer abroad, and deposits and withdrawals by residents to and from the account would be domestic transactions. Conversely, for deposits of emigrant workers in an account held in the host economy that are freely usable by relatives in the home economy, a convention can be adopted that withdrawals by relatives in the home economy would be treated as personal transfers.

Box 13.2. Remittances

13.27 Annex 4 describes the concept of remittances for measuring and analyzing international remittances and resource flows to households and NPISHs. Three categories of remittances are defined (personal remittances, total remittances, and total remittances and transfers to NPISHs), which may be included as supplementary items, as follows:

(a) **Personal remittances.** From the perspective of the recipient economy, personal remittances are defined as:

Personal transfers receivable;

+ Remuneration of employees receivable (see paragraph [12.10]);

– Taxes and social contributions payable (related to remuneration of employees, see paragraphs [13.28 and 13.32]) ;

– Transport and travel expenditures payable by residents employed by nonresidents (as defined under business travel in paragraphs [10.91–10.93 in *BPM7* Chapter 11);

+ Capital transfers receivable from households.

(b) **Total remittances.** From the perspective of the recipient economy, total remittances are defined as

Personal remittances receivable;

+ Social benefits receivable.

Although conceptually total remittances would include nonlife insurance premiums less service charges, and nonlife insurance claims, these transactions are excluded on practical grounds.

(c) **Total remittances and transfers to NPISHs.** From the perspective of the recipient economy, this category is defined as:

- Total remittances receivable;
- + Current transfers receivable by NPISHs;
- + Capital transfers receivable by NPISHs.

Current and capital transfers to NPISHs are generally recorded under miscellaneous current transfers or other capital transfers (discussed in paragraphs [13.53 and 14.31])

Workers' remittances are a supplementary sub-item of personal transfers that include *only current transfers by migrants who are employed in new economies and considered residents there* (see also paragraph A4.17).

Lotteries and other gambling

13.25 The amounts paid for lottery tickets or placed in bets consist of:

- (a) a service charge to the unit organizing the lottery or gambling (discussed in paragraph [10.171]); and
- (b) current transfers that are payable from the gamblers to the winners and, in some cases, to charities.

The transfers are regarded as taking place directly from those participating in the lottery or gambling to the winners and charities. That is, they are not recorded as transfers to or by the unit operating the lottery or gambling. Some of the service

charge at purchasers' prices may include gambling taxes, which are shown as payable by the operator, not the customers.

13.26 When nonresident households take part in gambling there may be net transfers between residents and nonresidents. In some cases, the winner of a lottery does not receive a lump sum immediately but a stream of payments over future periods. For this type of arrangement, a current transfer equal to the present value of the payment stream should be recorded along with the immediate purchase of an annuity. The recording of annuities is described in paragraphs [A6c.29–A6c.35].

2. Other current transfers

a. Current taxes on income, wealth, etc.

Reference:

[*SNA 2025*, Chapter 9, The Transfer Income Accounts; Section C, Current Taxes on Income, Wealth, etc.]

13.28 *Current taxes on income, wealth, etc. consist mainly of taxes on the incomes of households or profits of corporations and of taxes on wealth that are payable regularly every tax period (as distinct from capital taxes levied infrequently).* Current taxes on income, wealth, etc., in the balance of payments, consist mainly of taxes levied on the income earned by nonresidents from the provision of their labor or financial assets. Taxes on capital gains arising from assets of nonresidents are also included. Taxes on wages and salaries earned by nonresident employees are recorded as payable by the nonresident employees. Taxes on income and capital gains from financial assets can be payable by individuals, corporations, nonprofit institutions, governments, and international organizations. Taxes on interest and dividends are recorded as payable by the recipients of the interest or dividends.

Taxes on financial transactions (such as taxes on issue, purchase, and sale of securities) payable by nonresidents are also current transfers. (However, if such taxes have been classified as other taxes on products and production in the national accounts, by convention, they should be recorded in the earned income account.)

Taxes on income and wealth may be imposed by and payable directly to international organizations, such as the agencies of an economic union. Taxes on rent and ownership of land are treated as payable by the resident producers or resident notional institutional units; hence, they generally should not be recorded in the balance of payments. Inheritance taxes are treated as capital transfers (see paragraph [13.28] for the treatment of inheritance taxes). Refunds of taxes to taxpayers are treated as negative taxes; that is, the amount of taxes is reduced by tax refunds.

13.29 Any other current taxes (other than taxes on income and wealth, as explained in the preceding paragraph, and taxes on products and production that are recorded in the earned income account as explained in paragraph [11.91 in *BPM7* Ch 12]) are also included in the transfer income account. **13.30** Governments may grant licenses, permits or certificates, which provide the recipient with the permission to use or own goods or assets or engage in certain activities. If a payment for such a license is compulsory and the license is nontransferable then this payment is generally considered a tax. Only under limited scenarios, such as when it can be demonstrated that the payment is required and a service commensurate to the payment is consumed by the individual, is such a payment to be recorded as a sale of a service. Licenses and permits, which are recorded as taxes, should be recorded as taxes on products or production in the earned income account or as taxes on income wealth etc. in the transfer income account. Most such permissions are recorded as current taxes on income, wealth, etc. but if an enterprise incurs the cost

of the license as a result of engaging in production, then this is a tax on production and on imports (see paragraphs [12.91-12.92]). Compilers are recommended to maintain consistency with the national accounts in the recording of taxes.

13.31 Any fines or penalties on the late payment of taxes are included in the amount of associated taxes.

b. Social contributions

Reference:

[*SNA 2025*, Chapter 9, Transfer Income Accounts; Section D, Social Insurance Schemes and Section E, Net Social Contributions.]

13.32 *Social contributions are the actual or imputed contributions payable to social insurance schemes to make provision for social benefits to be paid. Social insurance schemes include social security schemes (which cover the entire community or large sections of it and are imposed, controlled, and financed by government units) and employment-related schemes (including funded and unfunded pension schemes). Employer-independent schemes with a strong resemblance to similar arrangements organized by employers or government generally also qualify as social insurance schemes if separate institutional units are established that are subject to regulation or supervision similar to employer-related pension schemes and in which accumulated contributions are set aside for retirement income.*

13.32a In the balance of payments, social contributions are recorded when a resident makes contributions to social security and other social insurance schemes in another economy for his or her employment in that economy, or a nonresident employer makes actual or imputed contributions on behalf of the employee. (Social contributions by an employer on behalf of its employees are included in remuneration

of employees; see paragraphs [11.22–11.23 in *BPM7* Ch 12].) Similarly, social contributions are recorded when a nonresident makes social contributions to the resident social security and other social insurance schemes or a resident employer makes actual or imputed contributions on behalf of a nonresident employee.

13.33 The calculation of the amount of social contributions varies for social security and other social insurance schemes. For social contributions to social security schemes, the amount of social contributions recorded in the transfer income account includes the actual contributions payable by the employers and employees. Because the amount payable by employers is included in the remuneration of employees, the total of social contributions payable to social security schemes is recorded as a transfer payable by the employees.

13.34 The calculation of social contributions to other social insurance schemes, which are related to the provision of pensions, involves contribution supplements and service charges. Contribution supplements, which represent investment income payable on pension entitlements, are described in paragraph [A6c.41], and charges for pension fund services are explained in paragraph [10.118 in *BPM7* Ch 11]. Furthermore, the treatment of social contributions is designed to treat social insurance transactions simultaneously as income transactions and financial transactions.

13.35 Total social contributions, less service charges to pension schemes are determined as follows:

- Employers' actual contributions;
- + Employers' imputed contributions;
- + Policyholders' actual contributions;

+ Policyholders' contribution supplements corresponding to investment income payable by pension schemes on pension entitlements;

– Service charges payable to pension schemes.

13.36 Employers' actual and imputed contributions are rerouted through employees (for explanation of rerouting, see paragraph [3.16]). All the service charges are treated as charges payable by policyholders, because the beneficiaries are the ultimate users. For determining the contribution supplements and service charges for a group or groups of policyholders, ratios of these items to actual contributions payable from various similar sources may have to be used.

13.37 Pension entitlements represent claims of beneficiaries on the funds. The payments of social contributions into the pension schemes and the receipts of pensions by beneficiaries therefore constitute the acquisition and disposal of financial assets. In addition, they are recorded as current transfers in the transfer income account as social contributions and social benefits, respectively, so that disposable incomes of households reflect these flows. Negotiated changes in pension entitlements are current transfers (if they relate to current periods) or capital transfers (otherwise). In contrast, changes arising from revision to model assumptions are other changes in volume (see paragraph [9.24]).

13.38 In order to reconcile the treatment of pensions as current transfers with the treatment of pension entitlements as financial assets, it is necessary to introduce a separate adjustment item to the balance on transfer income. This adjustment item adds back total social contributions less service charges to, and subtracts pension benefits from, the balance on transfer income. After the adjustment, the current account balance is the same as what it would have been if social contributions and

pension receipts were not recorded as current transfers. This item is called “adjustment for change in pension entitlements” and is equal to:

- total social contributions less service charges;
- + the total value of contribution supplements payable out of the property income attributed to pension fund beneficiaries;
- the total value of the pension benefits paid out as social benefits by pension schemes (see paragraph 13.40).

(Changes in pension entitlements arising from capital transfers are not included in this item.)

13.39 When cross-border flows of pension contributions and pension benefits are significant, the adjustment item must be recorded in order to reconcile the current and financial accounts. For the economy of the policyholders, the adjustment item is added to the balance on transfer income (a credit/revenue entry) and for the economy of the pension schemes, the opposite adjustment is needed; that is, the adjustment item is deducted from the balance on transfer income (a debit/expenditure entry). When cross-border flows are minor, the adjustment item may be omitted.

c. Social benefits

Reference:

[*SNA 2025*, Chapter 9, Transfer Income Accounts; Section F, Social Benefits Other Than Social Transfers in Kind.]

13.40 *Social benefits are current transfers receivable by households intended to provide for the needs that arise from certain events or circumstances, for*

example, sickness, unemployment, retirement, housing, education or family circumstances. Social benefits include pension and nonpension benefits payable under social security and other social insurance schemes. Also included are social benefits payable to households by government units or NPISHs to meet the same needs as those under social insurance schemes but that are not made under a social insurance scheme. Such social assistance benefits may be in cash or in kind. Cross-border social benefits may be insignificant but can be important in economies where a significant number of residents have or had employment in other economies.

d. Nonlife insurance premiums less service charges, and standardized guarantees

13.41 Nonlife insurance premiums less service charges *are the sum of [actual] non-life insurance (or reinsurance) premiums and premium supplements, less the insurance service charge payable by the policy holders.* and are recorded in the transfer income account. The service charges constitute purchases of services by the policyholders and are recorded as insurance services.

13.42 *Nonlife insurance premiums are the actual amounts payable to the direct insurer or reinsurer to secure insurance cover for a specific event over a stated time period, as covered by a nonlife insurance (or reinsurance) policy. Nonlife insurance premium supplements consist of the investment income earned from the investment of the (nonlife) insurance technical reserves.* The total of the nonlife insurance premiums and premium supplements payable have to cover payments of service charges to the insurance enterprises for arranging the insurance and payments for the insurance itself. The way in which the service charges are calculated is explained in paragraph [10.111]. After the service charges are

deducted from total nonlife insurance premiums and premium supplements, the remainder is described as nonlife insurance premiums less service charges. These are the amounts available to provide cover against various events or accidents resulting in damage to goods or property or harm to persons as a result of natural or human causes—fires, floods, crashes, collisions, sinkings, theft, violence, accidents, sickness, and so forth—or against financial losses resulting from events such as sickness, unemployment, and accidents.

13.42a Hybrid insurance products are defined in [paragraph[s] 5.XX and in Annex 9]. If a hybrid product is allocated to nonlife insurance, then the full amount of premiums less service charges is recorded in the transfer income account. Conversely, if a hybrid product is allocated to life insurance, no part of premiums less service charges is recorded in the transfer income account even though the product may have some features of nonlife insurance (instead, in this case, the premiums less service charges are recorded in the financial account).

13.43 Some units, especially government units, may provide guarantees in large numbers, for small amounts, with identical conditions, and where the probability of default can be well established. These types of guarantees are called standardized guarantees. Standardized guarantees have the same characteristics as nonlife insurance. The fees payable (and the investment income earned on the technical provisions for calls) are treated in the same way as nonlife insurance premiums and premium supplements, and the calls under the guarantees are treated in the same way as nonlife insurance claims. Therefore, premiums less service charges on standardized guarantees are derived from total premiums and premium supplements after deducting the service charges.

e. Nonlife insurance claims and calls under standardized guarantees

13.44 Nonlife insurance claims are the amounts payable in settlement of injuries or damages that result from an event covered by a nonlife insurance (or reinsurance) policy. Claims become due at the moment when the eventuality occurs that gives rise to a valid claim. They are equal to claims paid within the accounting period plus changes in the technical reserves against outstanding claims.

13.45 The nonlife insurance claim is treated as a transfer to the claimant that accrues at the time that the insured event occurs. Insurance claims have a mix of current and capital elements. As a convention, cross-border nonlife insurance claims are generally treated as current transfers. In the case of major catastrophic events, some proportion of the claims may be recorded as capital transfers (see paragraph [13.24 in BPM7 Ch 14]).

13.45a The treatment of claims and benefits to policyholders on hybrid insurance products depends on the allocation of the product as either life or nonlife, similar to the treatment of net premiums on hybrid products (see paragraph [13.42a]).

13.46 Claims and calls payable under standardized guarantees and other government schemes where the payments into the scheme are treated as nonlife insurance premiums are recorded under this item in the transfer income account (see also paragraph [13.43]).

f. Current international cooperation

13.47 Current international cooperation consists of *current transfers in cash or in kind between the governments of different countries or between governments and international organizations*. This includes:

- (a) transfers between governments that are used by the recipients to finance current expenditures, including emergency aid after natural disasters; they include transfers in kind in the form of food, clothing, blankets, medicines, and so forth;
- (b) annual or other regular contributions paid by member governments to international organizations (excluding taxes payable to supranational organizations) and regular transfers made as matter of policy by the international organizations to governments (for the treatment of capital contributions, see paragraph [13.32 in *BPM7* Ch 14]); and
- (c) payments by governments or international organizations to cover the salaries of those technical assistance staff who are deemed to be resident in the economy in which they are working and who are in an employer-employee relationship with the host government. Also included is technical assistance supplied in kind.

Current international cooperation does not cover transfers intended for purposes of capital formation; such transfers are recorded as capital transfers. Contributions that give rise to equity are acquisitions of shares or other equity (as in paragraph [5.26]).

13.48 External aid provided by governments through a nonresident entity created to undertake fiscal functions is also considered to be current international cooperation. These transfers are described in paragraphs [8.24–8.26].

13.49 When goods and services acquired from market producers are provided to governments or other entities by international organizations, other governments, or NPISHs, without charge to the recipient, they should be valued at market prices, that is, the prices paid by the purchasers. When a transfer in kind involves goods and services produced by international organizations, other governments, or NPISHs, the valuation should be based on cost of production, consistent with the general principles for the valuation of services produced by general government and NPISHs.

13.50 Generally, funding of technical assistance has characteristics of current transfers. However, technical assistance that is tied to or part of capital projects is classified as capital transfers because investment grants are capital transfers. (See also paragraphs [13.25–13.26 in BPM7 Ch 14] concerning investment grants, which are capital transfers.)

g. Miscellaneous current transfers

13.52 In the balance of payments, *miscellaneous current transfers include all current transfers, in cash or in kind, other than personal transfers, current taxes on income, wealth, etc.; social contributions; social benefits; net nonlife insurance premiums and claims; and current international cooperation.* The categories of miscellaneous current transfers between residents and nonresidents are described in paragraphs 13.53–13.58.

Current transfers to NPISHs

13.53 Current transfers to NPISHs are transfers received by resident NPISHs from nonresident institutional units in the form of membership dues, subscriptions,

donations, and so forth whether made on a regular or occasional basis. Grants and donations between NPISHs are generally classified as current transfers (e.g., donations for relief works).

Other miscellaneous current transfers

Fines and penalties

13.54 *Fines and penalties are compulsory payments imposed on institutional units by courts of law or quasi-judicial bodies.* Fines and penalties are generally punitive in nature and are treated as miscellaneous current transfers. Fines and penalties imposed by courts of law or other government bodies that are actually intended to compensate for injury to persons, damage to property, or other losses should be considered as compensation payments (instead of fines and penalties), and would be recorded as either current or capital transfers as explained in paragraphs [13.55 and 13.56]. Early or late repayment penalties agreed as part of the original contract are not included in current transfers; they should be treated along with the associated good, or service, or income, as appropriate.

13.54a Some fines and penalties may be established in contracts of mergers and acquisitions where the contract may include contingent fines or penalties based, for instance, on profitability, or a pending lawsuit, and resulting in a payment between the buyer and seller after the initial transaction. In these cases, the fines and penalties would be interpreted as an adjustment or update of the market price of the acquired enterprise and are treated as a direct investment transaction (or a portfolio investment transaction if the buyer has less than 10 percent of the voting power), instead of a current transfer.

Compensation payments

13.55 *Compensation payments consist of current transfers paid by institutional units to other institutional units in compensation for injury to persons or damage to property caused by the former that are not settled as payments of nonlife insurance claims.* Payments of compensation could be either compulsory payments awarded by courts of law or settlements agreed out of court. Compensation may cover nonfulfillment of contracts, injuries to persons, damages to property, or other losses that are not covered by insurance policies. This heading covers compensation for injuries or damage caused by other institutional units. It also includes ex gratia payments made by government units or NPISHs in compensation for injuries or damages caused by natural disasters.

13.56 Major compensation payments for extensive damages (e.g., oil spillages or side effects of pharmaceutical products, or anti-competitive behavior) are treated as capital rather than current transfers (see also paragraph [14.29]).

Nonrefundable contributions under citizenship-by-investment type programs

13.56a Some countries may offer citizenship or passports to individuals who make economic contributions to the country. Where such a program consists of a nonrefundable contribution (as opposed to an investment) by a nonresident individual to the government, nominated development funds, or possibly NPISHs, this transaction is recorded as a transfer. If the program is not intended for capital investment projects, then the transfer is treated as a current transfer. Nonrefundable contributions under citizenship-by-investment type programs are not identified separately in the balance of payments, however countries for which these programs are important can publish a supplementary item within other miscellaneous current transfers.

Other

13.57 Gifts and donations of a current nature not included elsewhere are regarded as current transfers. However, payments of membership dues or subscriptions to market nonprofit organizations serving businesses, such as chambers of commerce or trade associations, are treated as payments for services rendered and are therefore not transfers. (See also paragraphs [13.29–13.34 in *BPM7* Ch 14] on other capital transfers.)

13.58 Payments to international or supranational authorities that are regarded as being compulsory, and for which nothing is provided in return, but which are not taxes, are classified as miscellaneous transfers.

Chapter 14. Capital Account[¶]

Chapter 14 Capital Account

A. Concepts and Coverage

Reference:

2025 SNA, Chapter 11, Capital Account.

14.1 The capital account of the external accounts shows (a) *capital transfers receivable and payable between residents and nonresidents* and (b) *the acquisition and disposal of nonproduced, nonfinancial assets between residents and nonresidents*.

14.2 An overview of the capital account is shown in Table 14.1. The balance on the capital account shows the total credits less debits (or revenues less expenditures) for capital transfers and nonproduced, nonfinancial assets.¹ In addition, the sum of the current and capital account balances can also be shown as a balancing item. The balancing item is labeled as net lending (+)/net borrowing (–) from the capital and current accounts. That sum is also conceptually equal to net lending (+)/net borrowing (–) from the financial account, as discussed in paragraph [8.4]. Although conceptually equal, they usually differ in practice (see also paragraphs [2.24] and [8.3]). The current and capital accounts show nonfinancial transactions, with the balance requiring net lending or net borrowing, while the financial account shows how net lending or borrowing is allocated or financed.

¹ In economic literature, “capital account” is often used to refer to what is called the financial account in this *Manual* and in the *SNA*. The term “capital account” was also used in this sense in the Balance of Payments Manual prior to the fifth edition.

[¶] **Note: This Chapter is concurrently undergoing [Global Consultation](#).**

14.4 The capital account in the external accounts is designed to be consistent with the SNA capital account. There is however one difference. The *SNA* capital account shows capital formation for the full range of produced and nonproduced assets (shown in Table 5.1). The corresponding parts of the external accounts show only transactions in nonproduced, nonfinancial assets. This is because transactions in produced assets are included as imports and exports in the goods account and the services account, which does not distinguish whether those goods or services are destined for capital or current purposes.

14.5 The value of net lending/net borrowing in the external accounts is conceptually the same as the aggregate of net lending/net borrowing of the domestic sectors in the *SNA*. This is because all the resident-to-resident flows cancel out. It is also equal to the opposite of net lending/net borrowing of the rest of the world sector in the *SNA*.

14.6 Acquisition and disposal of nonproduced, nonfinancial assets are recorded at the time of change of ownership, in line with the general principles in paragraphs [3.41–3.59]. Capital transfers are recorded when all requirements and conditions for receiving them are satisfied and the receiving unit has an unconditional claim, such as when a court provides judgment, or an administrative ruling is made. If such judgement or ruling is subject to further appeal, then the time of recording is when the appeal is resolved. Determining the time that the receiving unit has an unconditional claim can be complex if there is a wide variety of eligibility conditions that have various legal powers. In some cases, a potential transfer recipient has a legal claim when certain conditions are satisfied, such as the prior incurrence of expenses for a specific purpose, or the passage of legislation. In other cases, the transfer recipient never has a claim on the donor and it should be

attributed to the time at which the cash payment is made, the asset is conveyed, or liability is canceled.

14.7 Acquisition and disposals of nonproduced, nonfinancial assets and capital transfers receivable and payable are recorded separately on a gross basis, rather than netted. Gross data are important in the context of cross-border analysis and allow the derivation of net flows, if needed. Principles for the recording and valuation of current and capital transfers are stated in paragraphs [12.16–12.19 {in Ch 13}].

| Table 14.1. Overview of the Capital Account | |
|---|---|
| | Credits/Revenues Debits/Expenditures |
| <i>Current account balance</i> | |
| Acquisitions (debits/expenditures)/disposals (credits/revenues) of nonproduced, nonfinancial assets | |
| Natural resources | |
| Contracts, leases, and licenses | |
| Marketing assets | |
| Crypto assets without a corresponding liability designed as a medium of exchange | |
| Capital transfers | |
| Debt forgiveness | |
| Capital taxes | |
| Investment grants | |
| Other capital transfers | |
| Nonlife insurance claims | |

| |
|--|
| <p>One-off guarantees and debt assumption</p> <p>Other</p> <p>Capital account balance</p> <p>Net lending (+)/net borrowing (–) (from current and capital accounts)</p> |
| Note: This table is expository; for standard components, see [appendix 9]. |

B. Acquisitions and Disposals of Nonproduced, Nonfinancial Assets

Reference:

2008 SNA, Chapter 10, The Capital Account, and Chapter [13, The Balance Sheet].

14.8 Nonproduced, nonfinancial assets consist of:

- (1) natural resources;
- (2) contracts, leases, and licenses
- (3) marketing assets (and purchased goodwill); and
- (4) crypto assets without a corresponding liability designed as a medium of exchange.

1. Natural resources

14.9 *Natural resources are assets that naturally occur, such as land, water resources, timber and fish stocks, and mineral and energy resources that have an economic value and over which ownership may be enforced and transferred. Environmental assets over which ownership rights have not, or cannot, be enforced, such as open seas or air, are*

excluded. International transactions in land and other natural resources do not usually arise because notional resident units are generally identified as the owners of these immovable assets. (The identification of notional units is discussed in paragraphs [4.34–4.40].) As a result, purchases and sales of these assets are generally resident-to-resident transactions. In contrast to a change of ownership of the resource, the right to use a natural resource on a temporary basis is classified as rent (as discussed in paragraphs [12.85–12.90]) or a contract, lease, or license, if it amounts to an economic asset in its own right (as discussed in paragraph [14.11]).

14.9a A notional unit would also be identified in the case where a natural resource is split between two entities as may happen if the owner grants rights or permissions to a non-residents institutional unit to exploit the natural resource, to the extent that both the user and the legal owner are entitled to future economic benefits from the use of the resource (see paragraphs [12.xx-12.yy]).

14.10 International transactions in land arise when there are acquisitions and disposals of land for enclaves of international organizations and foreign governments. (International organizations are defined in paragraphs [4.103–4.107].) International transactions also occur when there are voluntary changes of sovereignty over a particular area, whether for payment or as a transfer. The value of any associated equipment and buildings would be shown respectively in the goods account and the services account (see paragraph [11.108]), if practical.

2. Contracts, leases, and licenses

14.11 Contracts, leases, and licenses cover those contracts, leases, and licenses that are recognized as economic assets. *Contracts, leases, and licenses are non-produced assets where one party to a contract, lease or license is able legally and practically to realize the price difference between the market price for the use of an asset or the provision of a service,*

and the price specified in the contract, lease or license. These assets are creations of society and its legal system. Examples include marketable operating leases, permissions to use natural resources that are not recorded as outright ownership of those resources, permissions to undertake certain activities (including some government permits), and entitlements to purchase a good or service on an exclusive basis, if these permissions and entitlements are marketable. Transactions in these assets are recorded in the capital account, but holdings of these assets are not recorded in the IIP because there is no counterpart liability. (These assets are only recorded in the national balance sheet.)

14.12 A marketable operating lease can be transferred or subleased. It may be treated as an asset only when the lease specifies a predetermined price for the use of an asset that differs from the price the asset could be leased for at the current time. They could cover property, time-share accommodation (see paragraph [10.100(c)]), equipment, and other produced assets. Marketable operating lease asset transactions are recorded in the capital account when the lessee sells the right and thus realizes the price difference.

14.12a The owners of the other licenses and permissions mentioned in paragraph [14.11] acquire the rights to make profits at least equal to the amount that was paid for the licenses and permissions. If the owners realize this profit by on-selling to non-residents then, this transaction is recorded in the capital account.

14.13 Some leases and licenses are not nonproduced, nonfinancial assets and, therefore, are not covered in the capital account. Examples include the following:

- If the right to use land or another natural resource is provided on a short-term, nontransferable basis, then amounts payable are classified as rent (discussed in paragraphs [11.85–11.90]).
- If a government provides permission to undertake an activity, unrelated to its ownership of an underlying asset or a service, and the permit does not meet the definition of an economic asset, then a tax is recorded, or in limited circumstances a service (discussed in paragraphs [10.180–10.181 and 12.30]). An example of a tax could arise when a government issues a restricted number of gambling licenses.
- If ownership of intellectual property products, such as research and development, computer software and databases, and entertainment, literary, and artistic originals, is provided, then a service is recorded. Similarly, the provision of right to use or reproduce intellectual property products is shown as a service or, sometimes, as a good. In contrast, the sale of franchises or trademarks is included under marketing assets (see paragraph [14.17]). (The treatment of these items is elaborated in [Table 11.4].)
- A financial lease gives rise to a loan and a change of economic ownership of the leased asset to the lessee (discussed in paragraphs [5.56–5.60]). An operating lease for use of a produced asset gives rise to a service (discussed in paragraphs [10.153–10.157]).

14.15 Entitlement to future goods and services on an exclusive basis would be an asset under contracts, leases, and licenses if the party that has the entitlement to purchase goods or services at a fixed price at some time in the future has the ability to sell the entitlement to another entity. Examples include the transfer fees paid by one sporting club to another for the transfer of a player, or a publisher's

exclusive right to publish new works by a named author or to issue recordings by a named musician. Very rarely, such an asset may have a negative value (e.g., where the contract has an obligation to purchase at one price, and the market price has fallen below that, so the purchaser under the contract may have to pay another party to take up the obligation).

14.15a *Non-fungible tokens or NFTs are digital records hosted on a blockchain that are associated with a digital or physical asset or product but that are distinct from that asset or product.* NFTs record the rights assigned to the NFT owner and are distinct from the associated asset or product. There are three types of rights that are embedded in NFTs that are conferred on the owners, only one of which is recorded in the capital account. NFTs that grant limited commercial rights to another asset or product from which the owner can derive economic benefits (e.g., some form of royalties) are recorded under contracts, leases and licenses in the capital account. NFTs that convey no ownership rights and only allow for personal use of another asset or product are recorded under services and discussed in paragraph [11.xx]. There is no need to record NFTs that grant full ownership rights to another asset or product in the external accounts because the transaction in the underlying asset or product should already be recorded.

3. Marketing assets (and purchased goodwill)

14.17 *Marketing assets are the capitalized value of expenditures on advertising and promotional activities, to enhance the overall impression a customer or potential customer gains from their experience with the company and its products. They consist of items such as brand names, mastheads, trademarks, logos, and domain names. When sold separately from the entity that owns them, they are recorded as acquisitions and disposals of nonproduced, nonfinancial assets. (Marketing assets are included with purchased*

goodwill in the 2025 SNA asset categories. However, goodwill is typically implicitly included in the purchase price of the equity of a corporation that is taken over and cannot be separately identified and sold to another party.)

14.18 Internet domain names are recognized as a marketing asset in some cases. However, normal registration fees payable to a domain authority represent a service, because the fees are in return for work done. In contrast, where the domain name has a premium value (i.e., in excess of the basic registration fee) because of its scarcity, it is a kind of license included under marketing assets. Similarly, the fee for designing a new logo is a business service, whereas an amount to acquire an existing logo would be included under marketing assets.

4. Crypto assets without a corresponding liability designed as a medium of exchange

14.18a Crypto assets are digital representations of value that use cryptography and distributed ledger technology such as blockchains to enable parties to transact directly with each other without the need for a trusted intermediary. *Crypto assets without a corresponding liability designed as a medium of exchange are crypto assets for which there is no issuer. They consist of crypto assets without a corresponding liability designed to act as a general medium of exchange and those designed to act as medium of exchange within a platform only.* Unlike similar digital assets issued by, for example, a central bank, crypto assets without a corresponding liability are recorded as nonproduced nonfinancial assets, and not as financial assets, mainly because there is no counterpart liability (see Chapter 16 for a discussion on different crypto assets). Although some of these crypto assets may not yet act as a medium of exchange, and may be held only as a

store of value, they derive their value from the expectation that they may be used sometime as a medium of exchange.

14.18b Crypto assets without a corresponding liability designed as a medium of exchange are fungible crypto assets. Fungible crypto assets are divisible and not unique.

14.18c Cross-border flows such as purchases of crypto assets without a corresponding liability as an investment are recorded in the capital account as credits/revenues for the selling economy and debits/expenditures for the purchasing economy.

14.18d Cross-border transactions in goods or services where payment is made using crypto assets without a corresponding liability would be recorded as an import or export in the goods account or the services account, and a corresponding amount recorded in the capital account as, respectively, a credit/revenue or debit/expenditure.

14.18e See [Box 11.x] for discussion of the treatment of validation of transactions relating to crypto assets.

14.18f Crypto assets are still relatively new and because of the possibility of changes in the ways that crypto assets may be used and/or regulated, the classification of crypto assets designed as a medium of exchange without a counterpart liability has been put on the SNA and BPM research agendas.

C. Capital Transfers

Reference:

2025 SNA, Chapter 11, Capital Account, Section F.

14.19 *Capital transfers are unrequited transactions, either in cash or in-kind, in which the ownership of an asset (other than cash or inventories) changes from one party to another; or which obliges one or both parties to acquire or dispose of an asset (other than cash or inventories); or where a liability is forgiven by the creditor.*

The definition of transfers and the distinction between current and capital transfers are given in paragraphs [12.12–12.15]. Governments, households, and nonprofit institutions undertake transfers to convey a benefit to another party.

14.20 Transfers from enterprises consist of compulsory transfers to governments or other units under court orders, or voluntary transfers to nonprofit institutions and other entities. Unlike governments, households, or nonprofit institutions, commercial entities do not generally have the motivation to transfer resources to other entities for no return, so there are only limited cases where a commercial entity provides a capital transfer to another commercial entity, such as some [rare] cases of debt assumption, activations of one-off guarantees, nonlife insurance claims or compensation payments).

14.21 There may be imputed capital transfers as a result of government use for fiscal purposes of entities resident in other economies, as discussed in paragraphs [8.24–8.26].

1. Debt forgiveness

Reference:

IMF and others, *External Debt Statistics: Guide for Compilers and Users*, Chapter 8, Debt Reorganization.

14.22 *Debt forgiveness is the voluntary cancellation of all or part of a debt obligation within a contractual agreement between a creditor and a debtor.² In contrast to debt write-offs, debt forgiveness arises from an agreement between the parties to the debt and it has the intention to convey a benefit, rather than unilateral recognition by the creditor that the amount can no longer be collected. With debt forgiveness, the contractual arrangement cancels or forgives all or part of the principal amount outstanding, including interest arrears (interest payments that fell due in the past) and any other interest costs that have accrued. Debt forgiveness does not arise from the cancellation of future interest payments that have not yet fallen due and have not yet accrued.*

14.23 Debt forgiveness is distinguished from debt write-off and is treated as a capital transfer transaction. Debt forgiveness is unlikely to arise between commercial entities; more commonly there are debt write-offs (as discussed in paragraphs [9.8–9.11]). The unilateral writing off of debt or repudiation of debt is not a transaction and is recorded as other changes in volume in the other changes in financial assets and liabilities account rather than as an entry in the capital account or financial account. ([Appendix 1] on exceptional financing and [Appendix 2] on debt reorganization provide additional information.)

²This includes forgiveness of some or all of the principal amount of a credit-linked note arising from an event affecting the entity on which the embedded credit derivative was written, and forgiveness of principal that arises when a type of event contractually specified in the debt contract occurs—for example, forgiveness in the event of a type of catastrophe.

2. Capital Taxes

Reference:

IMF, *Government Finance Statistics Manual 2014*, Chapter 5, Revenue.

14.28 *Capital taxes consist of taxes charged at irregular and infrequent intervals on the values of the assets or net worth owned by institutional units or on the values of assets transferred between institutional units as a result of legacies, gifts inter vivos, or other transfers. They include:*

- (a) Capital levies. Capital levies consist of taxes on the values of the assets or net worth owned by institutional units levied at irregular, and very infrequent, intervals of time; and
- (b) Taxes on capital transfers. These consist of taxes on the values of assets transferred between institutional units. They consist mainly of inheritance taxes (death duties) and gift taxes, including those on gifts made between living members of the same family to avoid, or minimize, the payment of inheritance taxes. They do not include taxes on sales of assets.

Recurrent taxes on income and wealth as well as taxes on financial and capital transactions are classified as current transfers (see paragraphs [12.28–12.31]).

Detail on the classification of taxes can be found in the *Government Finance Statistics Manual*.

3. Investment grants

14.25 *Investment grants consist of capital transfers in cash or in kind made by governments [or international organizations] to other institutional units to finance all or*

part of the costs of their acquiring fixed assets. The recipients may be other governments or other entities. The recipients are obliged to use investment grants received in cash for purposes of gross fixed capital formation, and the grants are often tied to specific investment projects, such as large construction projects. Grants for investment made by organizations other than general government and international organizations are other capital transfers (see paragraph [14.29]). In contrast to investment grants, a foreign government may also fund an investment project as a direct investor (see paragraph [6.22]), in which case the amount invested is classified as equity in a direct investment enterprise. A direct investment stake is distinguished from a project funded by a capital transfer in that the direct investor owns voting power in the enterprise and has a right to future benefits, such as dividends or the right to sell the asset.

14.26 If the investment project continues over a long period of time, an investment grant in cash may be paid in installments. Payments of installments continue to be classified as capital transfers even though they may be recorded in a succession of different accounting periods. Investment grants in kind consist of transfers of transport equipment, machinery, and other equipment by governments to nonresident units and also the direct provision of buildings or other structures to nonresident units. Investment grants include transfers of military equipment in the form of weapons or equipment that are classified as fixed assets.

4. Other capital transfers

14.27a Other capital transfers consist of *capital transfers other than investment grants, capital taxes, and debt forgiveness.*

Nonlife insurance claims

14.24 Nonlife insurance claims are normally classified as current transfers. For exceptionally large claims, such as those following a major catastrophe or disaster at national level, some part of the claims may be recorded as capital transfers rather than as current transfers. It may be difficult for the parties to identify these events consistently, so, as a simplifying convention, all cross-border nonlife insurance claims are classified as current transfers, unless it is necessary to record a capital transfer to be consistent with the national accounts. To allow comparability with partner data, a supplementary item should be provided for insurance claims included in capital transfers. For current transfers relating to insurance premiums and claims, see paragraphs 12.41–12.46.

One-off guarantees and other debt assumption

14.27 Capital transfers occur when a one-off guarantee is activated and the guarantor acquires no claim on the debtor or a claim worth less than the value of the guarantee. The treatment is the same for other cases of debt assumption where the debt-assuming party is not a guarantor.

- If the original debtor still exists, the capital transfer is from the debt-assuming party to the debtor.
- If the original debtor no longer exists, the capital transfer is from the debt-assuming party to the creditor.

The value of any claim the debt-assuming party receives from the debtor (e.g., a promise of reimbursement) is regarded as a financial account transaction between the guarantor and the debtor. The treatment of one-off guarantees and

other cases of debt assumption is described in more detail in paragraphs [8.42–8.45], including the circumstance when the guarantor is in a direct investment relationship with the debtor. Different types of guarantees are distinguished in paragraph [5.68].

Other

14.29 Major payments in compensation for extensive damages or serious injuries not covered by insurance policies that are typically intended to recover losses over a multi-year period or to replace a nonfinancial or financial asset are included in capital transfers. The payments may be awarded by courts of law or by arbitration, or settled out of court. They include payments of compensation for damages caused by major explosions, oil spillages, the side effects of pharmaceutical products, anti-competitive behavior, and so forth. However, if an amount payable under a court order or settlement is identifiable to a specific unpaid debt, it should be recorded under the relevant financial account item. See also paragraphs [13.55–13.56] for payments of compensation included in current transfers.

14.30 Assets of persons changing their economic territory of residence are other changes in volumes, and not imputed as being a transfer, as discussed in paragraphs [9.21–9.22].

14.31 Capital transfers include large gifts and inheritances (legacies), including those to nonprofit institutions. These capital transfers could be made under wills or when the donor is still living. Capital transfers include exceptionally large donations by households or enterprises to nonprofit institutions to finance gross fixed capital formation, such as gifts to universities to cover the costs of building new residential colleges, libraries, and laboratories. Capital transfers

also include cash grants from donor governments or multilateral financial institutions to the debtor economy to be used to repay debt (see paragraph [A1.7]).

14.32 A capital contribution to an international organization or nonprofit institution is a capital transfer if it does not give rise to equity for the provider of the contribution.

14.33 As discussed in paragraphs [3.79, 12.51, and A2.67–A2.68], there is a transfer element with respect to concessional lending. Where governments or international organizations provide loans with concessional interest rates, no adjustment is made to the recording of the loan or of interest, nor is any transfer recorded in the core external sector statistics. However, the transfer element can be shown as a capital transfer at inception in supplementary data.

14.34 A bailout is a loosely defined term meaning a rescue from financial distress. One action that may occur as part of a bailout is that a government may buy assets for more than their market value. The sale and purchase of the asset should be recorded at the market value and a capital transfer from the government to the seller of the claim should be recorded for the difference between the total amount paid and the market price.

14.35 Household-to-household capital transfers may be identified separately when they are significant. They are included in the supplementary item personal remittances, as discussed in [Appendix 5].

14.35a As discussed in paragraph 13.XX citizenship of some countries or passports may be offered to individuals making nonrefundable economic contributions to that country. If these contributions are specifically earmarked for capital investment projects, they should be recorded as capital transfers. Where

these contributions are important, countries can publish a supplementary item within other capital transfers.

Chapter 15. Globalization

(New SNA/BPM chapter)

Chapter 23 (2025 SNA)/Chapter 15 (BPM7). Globalization

(New chapter)

Note: This draft chapter has been prepared jointly to cover the full range of topics to be included in the BPM7 and 2025 SNA chapters on globalization. Only those issues that are relevant to external sector statistics will be included in BPM7; likewise, only those issues that are relevant to national accounts will be included in the 2025 SNA.

A. Introduction

- 23.1 Globalization refers to the economic integration of economies around the world. Reduced trade barriers and advancements in communication, transportation, and technology have facilitated a rise in the cross-border movements of goods, services, capital, information, and people in recent decades. Those factors have also contributed to increasingly complex corporate structures that span across multiple economies. Such multinational enterprise (MNE) groups can be set up for many reasons, including to reduce labor costs, transportation costs, taxes, and proximity to markets. In addition, other global manufacturing and distribution arrangements, such as factoryless goods production and merchanting, have added to the complexities of interrelations between economies. These globalization activities pose challenges to traditional macroeconomic statistics, which are based on the concepts of residence and economic presence.
- 23.2 This thematic chapter is designed to elaborate on issues related to globalization that are touched upon throughout the *Manual/SNA*. It focuses on the conceptual, measurement, and analytical challenges that arise from deeper corporate linkages and the fragmentation of production processes across economies. These challenges motivate additional breakdowns and supplementary presentations, which provide alternative views or additional details that complement traditional macroeconomic statistics and are vital for better understanding the connections between economies.
- 23.3 To address the statistical challenges related to globalization, it is important to implement harmonized methodological guidelines to foster comprehensive data collection and international comparability. Even if headwinds develop to some of the factors driving globalization, the guidance in this chapter will still yield macroeconomic statistics that provide insights into the changing nature of globalization.
- 23.4 This chapter is organized as follows. Section B describes global production arrangements, while Section C defines MNE groups and discusses their role in globalization. Section D presents some of the measurement challenges related to MNE groups and global production. Section E introduces existing macroeconomic indicators, additional breakdowns, and alternative presentations that can help address these challenges and meet user needs. Finally, Section F describes analytical tools that have been developed to better understand the relationship between globalization and the domestic economy, including trade in value added and global value chains.

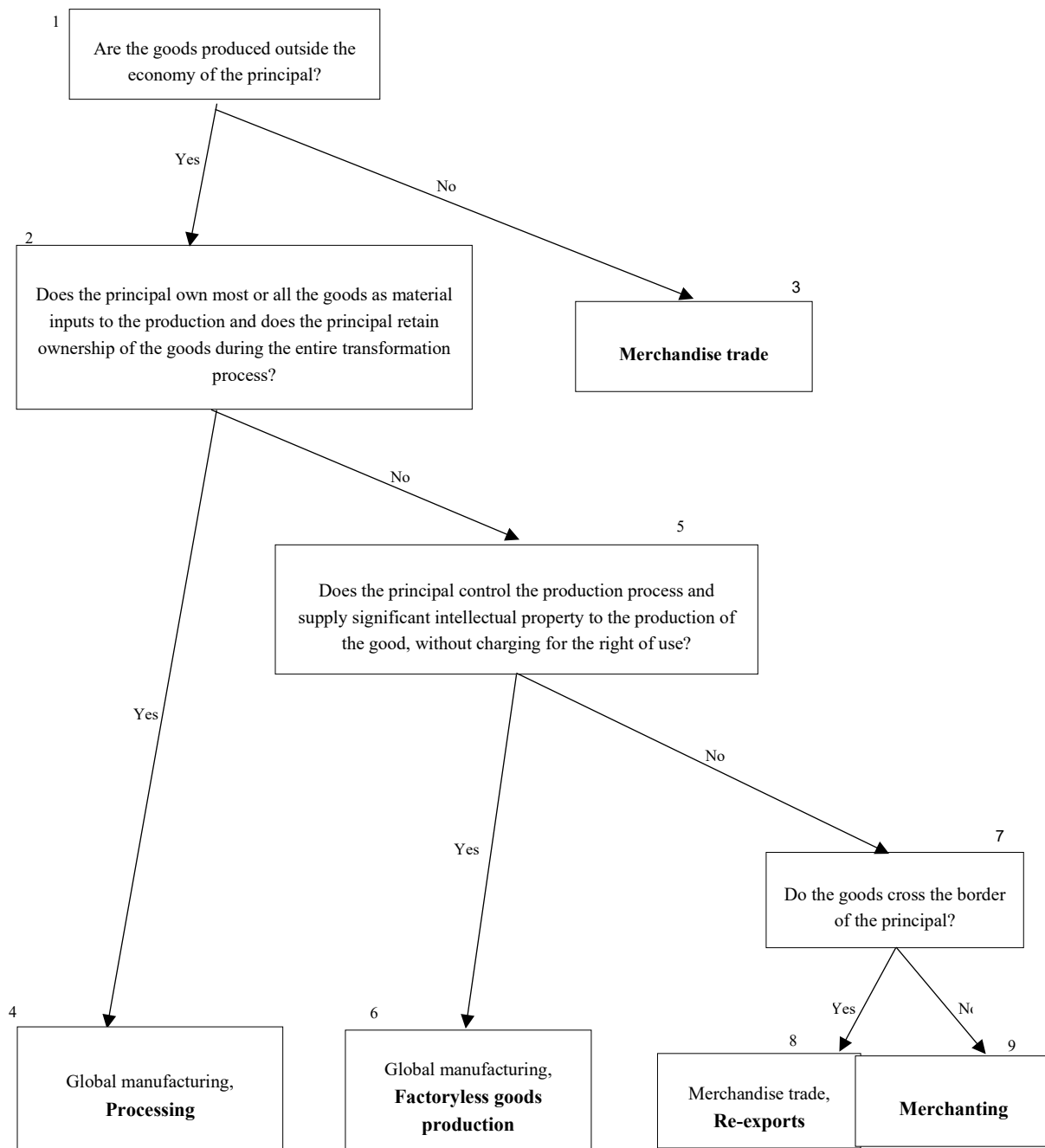
B. Global Production

- 23.5 A distinct aspect of globalization is the fragmentation of production in production chains between resident and nonresident firms—the basis of global value chains (GVCs). GVCs are a fundamental pillar of the modern global economy, enabling companies to take advantage of global specialization, cost efficiencies, comparative advantages, and market opportunities. See paragraph [23.112] for more details about GVCs.

1. Global Manufacturing and Distribution Arrangements

- 23.6 Global manufacturing and distribution arrangements can be broken into different types. Figure [23.1] presents a decision tree to identify whether a transaction in a global arrangement is traditional merchandise trade, re-exports, merchanting, processing, or factoryless goods production. These arrangements are described below, and examples are provided in Box [23.1].

Figure 23.1. Global manufacturing and distribution arrangements decision tree



Notes: The decision tree is from the point of view of the principal enterprise that organizes or arranges the manufacture and/or movement of goods and has ownership of the goods at some stage. Principals may engage in several types of production arrangements that may also involve a combination of domestic and foreign production.

Re-exports

23.7 *Re-exports are goods produced in other economies, and previously imported, that are exported with no substantial transformation from the state in which they were previously imported [insert reference to 2025 SNA Chapter 33].*

- The price of the re-exported good may differ from its price at the time it was originally imported, due to factors such as transport costs, dealer's margins, and holding gains or losses. For goods to be included as re-exports, a resident must acquire and subsequently resell the goods with the goods passing through the territory. Goods that are bought and resold but do not pass through the territory of the unit initially purchasing the goods are included in goods under merchanting—see paragraph [23.12]. By convention, goods which are imported from a contractor and subsequently exported to a final buyer by a factoryless goods producer are not treated as re-exports, even if the goods pass through the economy of the factoryless goods producer. Instead, these goods are recorded as goods traded within a global manufacturing arrangement.
- 23.8 Goods in transit are not recorded in imports or in re-exports—instead, they are excluded from the general merchandise of the territory of transit. Also, goods cleared by customs, but re-exported without coming into ownership by a resident of that economy, should not be included in re-exports. In contrast to re-exports, in the case of returned goods, there is no change of ownership or the parties later agree to annul the change of ownership.
- 23.9 In cases where the state of the imported goods is substantially transformed, which could be indicated by a change in the Harmonized System (HS) code, goods are recorded as domestically produced exports rather than re-exports (e.g., goods that have been assembled or processed, or goods that have become rags, waste, scrap, or antiques). Used goods that were previously imported and retain the same HS code, but have suffered wear and tear, could in most cases be included in re-exports depending on the rules of origin that the economy applies. Whereas international recommendations¹ on rules of origin exist, the origin of the goods will be determined at a national level. The case of imported goods processed without change of ownership is discussed in paragraphs [23.21 – 23.27]. Goods temporarily imported or re-exported without a change of ownership, such as for repair or operating lease, are not included.
- 23.10 Where possible, re-exports should be shown separately as a supplementary item, particularly in economies where re-exports are a significant proportion of exports. Because re-exported goods are not produced in the economy concerned, they have less connection to the economy than other exports. Economies that are major transshipment points and locations of wholesalers often have large values of re-exports. It may be of interest to derive the value of imports destined for re-export, calculated from re-exports with any timing adjustment.
- 23.11 *Re-imports are domestic goods imported in the same state as previously exported, without any substantial transformation occurring on the goods while they were outside the territory* [insert reference to 2025 SNA Chapter 33]. Where significant, re-imports may be shown separately. Re-imports tend to arise in order to reverse a previous export, while re-exports generally arise because of transport, storage, or distribution through a territory other than that of the buyer or seller. For the goods to be included in re-imports, a nonresident must have acquired the goods, then resell them to a resident with the goods leaving and reentering the territory. (In cases where there was no change of ownership, they are omitted from imports, e.g., goods for repair or goods sent for processing.)

Merchanting

- 23.12 *Merchanting is defined as the purchase of goods by a resident (of the compiling economy) from a nonresident combined with the subsequent resale of the same goods to another nonresident without the goods being physically moved in and out of the compiling economy.* Merchanting occurs for transactions involving goods where physical possession of the goods by the owner is unnecessary for the process to occur.
- 23.13 Inverse merchanting is a special case of merchanting, occurring when both the entity that is selling to the nonresident merchant and the entity that is subsequently purchasing from the nonresident merchant are both resident in the same economy (the compiling economy) and where the goods do not leave and re-enter the compiling economy. Because there is no physical cross-border flow to or from the compiling economy, it may be challenging to identify inverse merchanting from traditional merchandise trade data sources such as customs declarations. However, the goods account of the compiling economy should reflect that a change of economic ownership happens twice, first, as export of general merchandise when the goods are sold to the nonresident merchant and second, as

¹ World Customs Organization, *International Convention on the Simplification and Harmonization of Customs Procedures (Revised Kyoto Convention)*.

import of general merchandise when the goods are subsequently purchased from the nonresident merchant, and appropriate adjustments should be made if international merchandise trade statistics (IMTS) flows are used as a source.

- 23.14 The treatment of merchanting is as follows:
- (a) The acquisition of goods by merchants is shown under goods acquired under merchanting as a negative export of the economy of the merchant;
 - (b) The sale of goods by merchants is shown under goods sold under merchanting as a positive export of the economy of the merchant;
 - (c) The difference between sales over purchases of goods for merchanting is shown as the item “net exports of goods under merchanting.” This item includes merchants’ margins, holding gains and losses, and changes in inventories of goods under merchanting. As a result of losses or increases in inventories, net exports of goods under merchanting may be negative in some cases;² and
 - (d) Because the change of ownership differs from the physical flow of goods, merchanting entries are valued at transaction prices as agreed by the parties, not free on board (FOB).
- 23.15 The partner allocation of net exports of goods under merchanting should be done by adding the positive and negative entries of goods under merchanting for each partner economy.
- 23.16 The rationale for recording goods under merchanting in the goods account and for treating purchases of goods for merchanting as a negative export rather than an import is as follows: firstly, the merchant acts similar to a wholesaler or a retailer whose output is measured by the trade margin realized on the goods they purchase for resale; next, the treatment of the net exports as goods rather than services maintains a global trade in goods balance; and finally, if the amounts of imports and exports of the merchant were recorded gross, this would artificially inflate the merchandise trade in the economy of the merchant.
- 23.17 The merchanting label is only used in the accounts of the economy in which the merchant is resident. In the counterpart exporting and importing economies, export sales to merchants and import purchases from merchants are included under general merchandise. Goods under merchanting are shown separately in statistics of the economy of the merchant because they are of interest in their own right and because they are not covered by the customs system of that economy.
- 23.18 Wholesaling, retailing, commodity dealing, and management of manufacturing may also be carried out under arrangements where the goods are present in the economy of the owner, in which case they are recorded as general merchandise, rather than as merchanting.
- 23.19 When a merchant resells goods to a resident of the same economy as the merchant, this does not meet the definition of merchanting. Accordingly, the purchase of goods is shown as imports of general merchandise to the economy in that case. If the entity that purchased from a merchant in the same economy subsequently resells the goods to a resident of another economy, whether or not the goods enter the economy of the merchant, the sales of goods are recorded in exports of general merchandise from the economy of the merchant and the entity that purchased the good from the merchant. (Although such a case is very similar to merchanting, it does not meet the definition given above. In addition, it is impractical for the first merchant to record the purchases as merchanting because that merchant may not know whether or not the second merchant will bring the goods into the economy.)

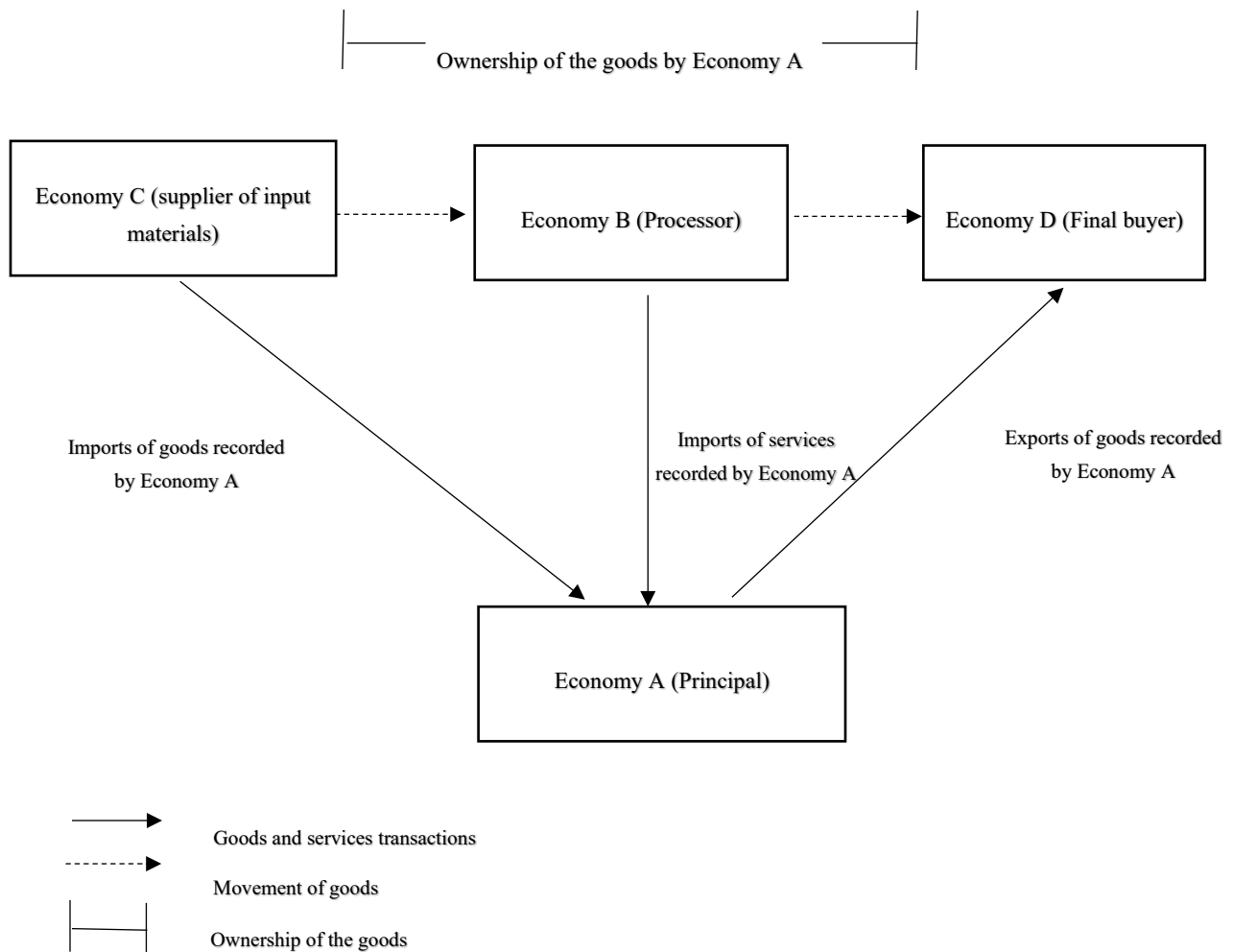
² When compiling statistics by partner economy for goods under merchanting, it is common to see negative net exports for partner economies from which the merchant acquires goods.

- 23.20 Sometimes a purchaser may be uncertain whether the goods will be resold to residents of the same economy or others. In this case, intentions can be used as an indicator, with subsequent adjustment if intentions are not realized.

Processing

- 23.21 Under a processing arrangement, the principal owns or acquires material inputs and purchases manufacturing services from a nonresident processor (who may provide some material inputs), to substantially change the goods. The ownership of the processed goods does not change during the manufacturing process. The finished goods are then returned to the principal, sent elsewhere for further processing, or dispatched to final customers. In the simplest scenario, goods are physically sent abroad from the economy of the principal to the economy of the processor and returned after processing. In this case, the movement of the goods are recorded in the IMTS of both economies, but no general merchandise transactions would be recorded. Figure [23.2] illustrates a more complex example of a processing arrangement.

Figure 23.2. Goods for processing arrangement



Notes: The principal in Economy A purchases material inputs from Economy C. The goods are shipped to Economy B for further processing. The final goods are sold to Economy D. The principal has ownership of the goods during the processing, but the goods may not pass through Economy A during the production process. There are variations of processing arrangements. Material inputs may also be sourced from Economy A, Economy B or Economy D. Similarly, the final goods may be sold to Economy A, Economy B or Economy C. The key aspect in all variations is that the processor in Economy B does not take ownership of the goods during the processing. In all variations, the physical flow of goods differs from the change of ownership to some extent.

- 23.22 Goods transactions between the principal in a processing arrangement and other parties may be shown as a supplementary sub-item of general merchandise.
- 23.23 In some cases, the processor provides other materials that are used in the manufacturing process alongside the material inputs owned by the principal. Other materials provided by the processor are treated as intermediate consumption of the processor. In many cases, the principal supplies inputs of intellectual property such as product design without charging the processor for the right to use.
- 23.24 As there is no change of ownership of the processed goods between the processor and the economy from which the goods have arrived or between the processor and the economy to which the goods are dispatched, no general

merchandise transactions are recorded by the processor.

23.25 Purchases of material inputs (i.e., goods to be processed) by the principal in a processing arrangement may be obtained from residents of the same economy as the principal, the same economy as the processor, or a third economy. The treatment is as follows:

- (a) when the goods are acquired from residents of the same economy as the principal, there is no international transaction; and
- (b) when the goods are acquired from residents of the same economy as the processor or a third economy, the principal records imports of general merchandise.

23.26 Sales of finished goods (i.e., goods after processing) are treated as follows:

- (a) when the goods are sold to residents of the same economy as the principal, there is no international transaction; and
- (b) when the goods are sold to residents of the same economy as the processor or a third economy, the principal records the sale as exports of general merchandise.

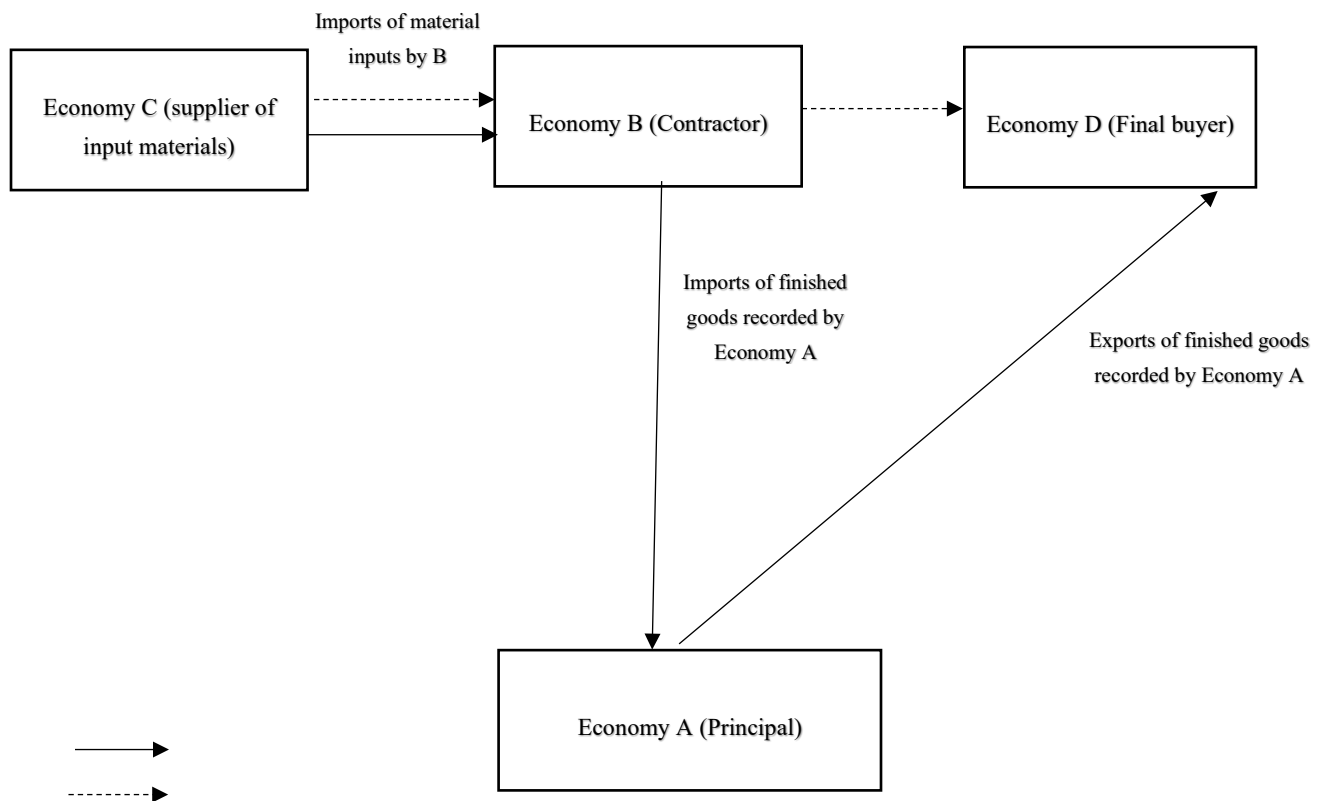
The principal could report merchanting in the case of minor processing (see paragraph [23.12] and the decision tree in Figure [23.1]).

23.27 The processing fee that the processor charges the principal under a processing arrangement should not be recorded under general merchandise but as a service under manufacturing services on physical inputs owned by others.

Factoryless Goods Production

23.28 *A factoryless goods producer is a principal that controls the production of a good by undertaking the entrepreneurial steps and providing the technical specifications required to produce the good, but that fully outsources the material transformation process required to produce the output.* The factoryless goods producer supplies inputs of intellectual property such as product design, without charging for the right to use the intellectual property, but outsources both the acquisition of all of the material inputs and the manufacturing process to a, usually nonresident, contractor. The factoryless goods producer buys the finished goods from the contractor at a price that includes the value of material inputs and processing but does not include the value of intellectual property used in the transformation process. The finished goods may be used by the principal as inputs into further production, sent elsewhere for further processing, or dispatched to final customers. Figure [23.3] illustrates one example of a factoryless goods producer arrangement.

Figure 23.3. Factoryless goods producer arrangement



Notes: The principal in Economy A supplies the design specifications but outsources the acquisition of the material inputs and the manufacturing to a contractor in Economy B. The contractor acquires the material inputs from Economy C. The contractor sells the finished goods to the principal at a price that includes the cost of the material inputs plus the manufacturing costs. The goods are then sold to the final buyer in Economy D at a price that will further reflect the input of the design specification by the principal. The final goods may be shipped directly from Economy B to Economy D without passing through Economy A. There are variations of factoryless goods production. Material inputs may also be sourced from Economy A, Economy B, or Economy D. Furthermore, the principal may source the material inputs and sell them via merchanting to the contractor. The key aspect is that the contractor takes ownership of the material inputs. Finished goods may also be sold to Economy A, Economy B, or Economy C.

- 23.29 Transactions between the factoryless goods producer and other parties may be shown as a supplementary sub-item of general merchandise.
- 23.30 Under factoryless goods production, the material inputs are substantially transformed by the contractor. The inputs of intellectual property products into the transformation of the product retained by the factoryless goods producer should also be significant. As a general guideline, the input values of intellectual property products such as of research and development, design, innovation, and other marketing assets (trademarks, brand names, logos, etc.) supplied by the factoryless goods producer will be greater than the fee paid to the contractor excluding the material inputs.
- 23.31 The goods that the factoryless goods producer buys from the contractor are recorded as general merchandise imports at the value agreed between the principal and the contractor. These goods are considered inputs to the production of the factoryless goods producer.
- 23.32 Sales of finished goods are treated as follows:

- (a) when the goods are sold to residents of the same economy as the factoryless goods producer, there is no international transaction but a domestic transaction to show the sale of the goods to final consumer in the resident economy; and
- (b) when the goods are sold to residents of the same economy as the contractor or a third economy, the factoryless goods producer records the sale as exports of general merchandise.

Box 23.1. Examples of Global Manufacturing and Distribution

Arrangements

Example 1—Re-exports

A seaport in Economy A serves as a gateway hub for international trade for economies in the region. One practice is for car dealerships to set up near the port. Individuals can travel to the seaport and buy new and secondhand cars directly from the dealer in Economy A.

A car dealer of Economy A imports a car from Economy C for 1000. A resident of Economy B travels to the seaport and buys the car for 1200, driving home through Economy A to Economy B.

Since the goods are imported and subsequently exported, with a change of ownership happening twice in Economy A, and the goods pass through Economy A, the goods are recorded gross in the imports and exports of Economy A as follows:

| | |
|--|------------------|
| General merchandise imports (from Economy C) | 1000 Expenditure |
| General merchandise exports (to Economy B) | 1200 Revenue |
| <i>Of which: Re-exports</i> | 1200 Revenue |

(As the goods are in excess of customs thresholds in this example, they are included in general merchandise rather than in travel).

Example 2—Merchanting with manufacturing services that do not change the condition of the goods

A resident of Economy A acquires books from a resident of Economy C for 10. The resident of Economy A has them sent to Economy B, without the books passing physically through Economy A, for a resident of Economy B to put in boxes, for a charge of 3 payable by the resident of Economy A. The books are then sold by the resident of Economy A to a resident of Economy D for 20.

Since the goods are in the same condition, the merchanting treatment applies. The goods and services account entries for Economy A would be:

| | |
|--|---------------------------------------|
| <i>Goods acquired under merchanting (from Economy C)</i> | <i>-10 Revenue (negative exports)</i> |
| <i>Goods sold under merchanting (to Economy D)</i> | <i>20 Revenue</i> |
| Net exports of goods under merchanting | 10 Revenue |
| Import of manufacturing services on physical inputs owned by others (from Economy B) | 3 Expenditure |

(Economy C records goods exports of 10 to Economy A under general merchandise; Economy B records services exports of 3 with Economy A; and Economy D records goods imports of 20 under general merchandise with Economy A.)

Example 3—Processing arrangement: Manufacturing services that change the condition of the goods

A resident of Economy A (the principal) acquires oil from a resident of Economy C for 10. The oil is sent to Economy B, without passing through Economy A, for refining by a resident of Economy B, for a charge of 15; the oil continues to be owned by the resident of Economy A. The refined product, for instance fuel, is then sold to a resident of Economy D for 30.

Since the goods are not in the same condition, the merchanting concept does not apply. The goods account and services account entries for Economy A would be:

| | |
|--|----------------|
| *General merchandise import (from Economy C) | 10 Expenditure |
| *General merchandise export (to Economy D) | 30 Revenue |
| Import of manufacturing services on physical inputs owned by others (from Economy B) | 15 Expenditure |

Economy C records goods exports of 10 to Economy A, Economy B records only manufacturing services on physical inputs owned by others exports of 15 to Economy A (not exports or imports of goods), and as noted above, Economy D records goods imports of 30 from Economy A under general merchandise (not goods imports from Economy B).

Economy B may wish to identify the values of material inputs received and goods sent abroad after processing as supplementary items.

Example 4—Factoryless goods production

A resident of Economy A (the principal, or factoryless goods producer) contracts the production of sportswear to a manufacturer in Economy B. The contractor in Economy B purchases the material inputs from Economy C for 3. The transformation of the material inputs by the contractor in Economy B is done under specifications provided by the principal. The principal purchases the finished sportswear from the contractor for 7 (which was agreed as part of the contracting arrangement), and resells these goods directly to the final buyer in Economy D for 28 without the goods passing through Economy A.

| | |
|---|---------------|
| The goods account entries for Economy A would be: | |
| *General merchandise imports (from Economy B) | 7 Expenditure |
| *General merchandise exports (to Economy D) | 28 Revenue |

| | |
|---|---------------|
| The goods account entries for Economy B would be: | |
| General merchandise imports (from Economy C) | 3 Expenditure |
| General merchandise exports (to Economy A) | 7 Revenue |

Economy C and Economy D should record the counterpart transactions with Economy A and Economy B. No trade is recorded between Economy B and Economy D.

Example 5—Factoryless goods production with material inputs acquired and resold under merchanting by the principal to the contractor

A resident of Economy A (the principal, or factoryless goods producer) contracts the production of sportswear to a manufacturer in Economy B. The principal sources the material inputs from Economy C for 3 and resells the material inputs to the contractor in Economy B for 4, without the goods passing through Economy A. As in Example 4, the transformation of the material inputs by the contractor in Economy B is done under specifications provided by the principal. The principal purchases the finished goods from the contractor for 8, and resells these goods to the final buyer in Economy D for 28 without the goods passing through Economy A.

| | |
|--|-------------------------------|
| The goods account entries for Economy A would be: | |
| *Goods acquired under merchanting (from Economy C) | –3 Revenue (negative exports) |
| *Goods sold under merchanting (to Economy B) | 4 Revenue |
| Net exports of goods under merchanting | 1 Revenue |
| *General merchandise imports (from Economy B) | 8 Expenditure |
| *General merchandise exports (to Economy D) | 28 Revenue |

Economy C records goods exports of 3 to Economy A; Economy B records goods imports of 4 and goods exports of 8 with Economy A; and Economy D records goods imports of 28 with Economy A.

* Items marked with an asterisk are recommended to be shown separately as supplementary items for recording global production arrangements of Economy A (see paragraphs [23.14, 23.22, and 23.29]).

C. Multinational Enterprise (MNE) Groups

2.

References:

International Monetary Fund (IMF), *Special Purpose Entities: Guidelines for a Data Template*

Organization for Economic Cooperation and Development (OECD), *OECD Benchmark Definition of Foreign Direct Investment*

United Nations Economic Commission for Europe (UNECE), *UNECE Guide to Measuring Global Production*

1. Definition of MNEs, MNE Groups, and Concept of Control

23.33 *An MNE is a legal entity that has at least one nonresident affiliate or branch, and exercises control over its affiliate(s) or branch(es) either directly—by owning over 50 percent of the voting power in the entity—or by indirect transmission of control. The MNE is the ultimate controlling parent—the direct investor at the top of the control chain. The MNE group consists of the MNE and the set of entities—regardless of their economies of residence—that are under the control of the same ultimate controlling parent [insert reference to relevant paragraph in BPM7 Chapter 4/2025 SNA Chapter 5].*

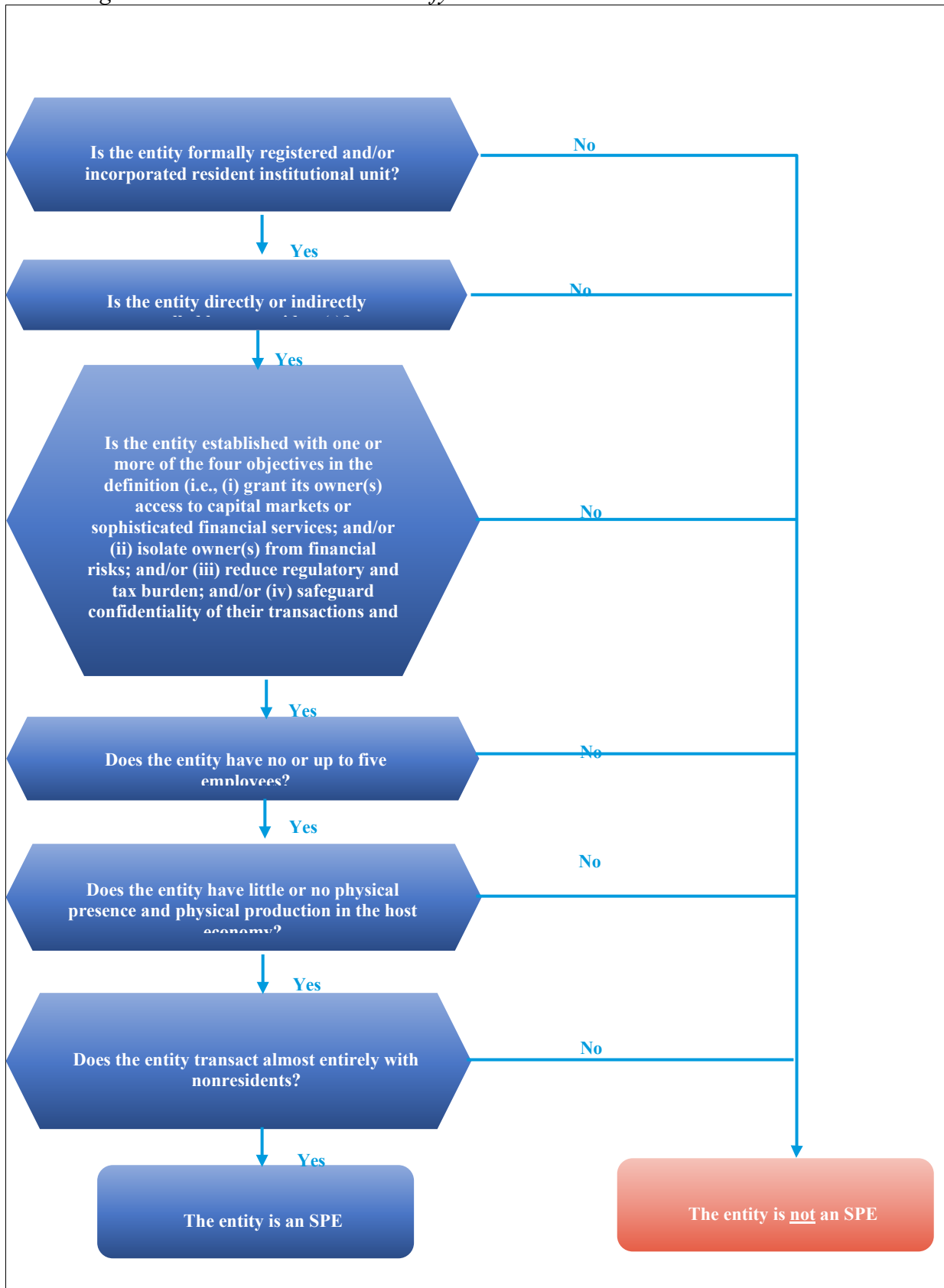
23.34 *Control refers to the ability to determine general corporate policy of a corporation. In practice, control is determined to exist if an investor has more than 50 percent of the voting power in an enterprise. The control may be direct (through ownership of voting power or other arrangements) or indirect (through ownership of enterprises that in turn have voting power). This definition of control is aligned with the Framework of Direct Investment Relationship (FDIR), which is a generalized methodology for identifying and determining the types and extent of direct investment relationships [insert references to BPM7 Chapter 6 and OECD Benchmark Definition of Foreign Direct Investment].*

23.35 It is important to distinguish between ownership and voting power when determining control. While ownership shares and voting power generally are aligned, this is not always the case. For instance, voting power may be greater or less than the percentage of shares held when there are “golden shares” or dual classes of shares, i.e., in cases in which nonvoting shares or some shares have higher weights that allow one or more parties to exercise voting power disproportionately to their share ownership [insert reference to BPM7 Chapter 6]. Control by government, or another public unit, can also be exercised in other ways than owning more than half of the voting power.

2. Understanding the Role of Special Purpose Entities (SPEs) within MNE Groups

23.36 Through their activities, MNEs manage production, trade, financial services and intermediation, direct investment, and international transfer of knowledge and technology, with the aim of maximizing their global after-tax profits. MNEs often have significant impact on the real economy through their activities, but they sometimes set up entities with limited presence in the form of employment and physical production to benefit from different regulatory and tax regimes. Special purpose entities (SPEs) are specific cases of such entities and are defined in Chapter 4/5 [insert reference to relevant paragraphs when available]. The decision tree in Figure 23.4 can also be used to identify SPEs.

Figure 23.4. Decision Tree to Identify Resident SPEs



- 23.37 Although SPEs have no or little physical presence, they can have a substantial impact on traditional macroeconomic statistics—for example, inflating (foreign) direct investment statistics due to pass-through funds or data for services exports if they own IPPs. Host jurisdictions are encouraged to report supplementary data for SPEs, particularly when such entities are significant [insert references to relevant paragraphs in *BPM7/2025 SNA*].
- 23.38 A typology of SPEs is presented in Table [23.1]. It can be used to identify SPEs and to determine their appropriate institutional sector. The typology aims to delineate the different types of SPEs based on their economic functions and relate them to their institutional sector.
- 23.39 The typology should be used as a complement to the definition of SPEs as it is not meant to be either exhaustive or prescriptive. The entities covered by the typology may be SPEs, but not all entities of the types listed are classified as SPEs. For instance, SPEs may include securitization vehicles, but not all securitization vehicles meet the definition of SPEs. A securitization vehicle would, for example, not be classified as an SPE if it has significant transactions with residents.

Table 23.1. Typology of SPEs [The table will be updated to include 2025 *SNA* and *BPM7* references in due course]

| No | SPE Type | Description | 2008 <i>SNA</i> | <i>BPM6</i> | 2008 <i>SNA</i> sector |
|---|---|---|--------------------|------------------------|------------------------------|
| Category I: Corporate Groups' Captive Financial Entities | | | | | |
| <i>(Those captive entities created by a financial or nonfinancial nonresident corporate to fulfil specific financial activities, other than insurance, for the sponsor)</i> | | | | | |
| 1.1 | Conduits | Raising or borrowing funds, often from unrelated enterprises, and remitting those funds to its parent or to another related enterprise. Typically, do not transact on the open markets on the asset side. | Para 4.59 | Para 4.51 Para 4.86 | S127 |
| 1.2 | Holding companies | Owning a controlling level of equity in subsidiaries, without actively directing them (Passive holding corporations) | Para 4.59 | Para 4.51 Para 4.84 | S127 |
| 1.3 | Holding financial assets for securitization | | | Para 4.51 | S127 |
| 1.4 | Intra group lending companies | Loan funding from and to intra group companies Entities taking and granting inter-company loans | | Para 4.51 | S127 |
| 1.5 | Captive factoring and invoicing companies | Concentrating sales claims and invoicing sales. | | | S127 |
| 1.6 | Captive financial leasing companies | Engaging in lease-in lease-out agreements or as a financial intermediary in a chain of vehicles in which | | Para 4.83 | S127 |

| No | SPE Type | Description | 2008 SNA | BPM6 | 2008 SNA sector |
|--|---|--|-------------|------------------------|-----------------------|
| | | the end vehicle is involved in the leasing of equipment or fixed assets. | | | |
| 1.7 | Other captive financial companies | Dealing with financial needs of a group, such as financing particular projects and loan origination. | | Para 4.87 | S127 |
| Category II: Specialized Financial Entities | | | | | |
| <i>(These financial entities, with a degree of operational autonomy, have been specially created to isolate the risks of the parent companies to structure financial transactions for or securitize assets of the parents)</i> | | | | | |
| 2.1 | Captive insurance companies | Providing insurance to group enterprises. | | Para 4.88 | S128 |
| 2.2 | Securitization vehicles/Financial vehicle corporations | Carrying out securitization transactions in order to isolate the payment obligations of the undertaking from those of the originator, or the insurance or reinsurance undertaking (in the case of insurance-linked securitizations). Repackaging of existing financial assets. | Para 4.59 | Para 4.51 Para 4.77 | S125 |
| 2.3 | Holding financial and nonfinancial assets (including real estate) for related companies | Holding financial and nonfinancial assets of related companies with the goal of capital appreciation, interest/dividend income, and other income. | | | S11 and S125 |
| 2.4 | Companies carrying out other financial functions | Performing factoring, invoicing on open markets, financial leasing on open markets, and other financial assets management. | | Para 4.51 Para 4.76 | S125 |
| Category III: Corporate Groups' Nonfinancial Entities | | | | | |
| <i>(Those SPEs created by a financial or nonfinancial nonresident entity to fulfil specific nonfinancial activities)</i> | | | | | |
| 3.1 | Ancillary companies | Registered or incorporated companies providing ancillary services that are not resident in the same economy as its parent. | | Para 4.51 | S11 |
| 3.2 | Operational leasing companies | Holding fixed assets, such as planes, vessels, and machinery, for the purpose of leasing them out. | | | S11 |
| 3.3 | Merchanting companies | Purchasing goods from a nonresident and re-selling the goods to another nonresident (merchanting companies have ownership of the goods traded). | | | S11 |

| No | SPE Type | Description | 2008 SNA | BPM6 | 2008 SNA sector |
|--|--|--|-------------|-----------|-----------------------|
| 3.4 | Royalty and licensing companies | Concentrating group receipts concerning royalties and similar flows received from intellectual property rights and trademarks. Such a company of an SPE-type receiving royalties or similar flows for a group of enterprises or individuals is regarded as an independent royalty and licensing company. | | | S11 |
| 3.5 | Legal ownership of intangible assets | Holding intangible assets for a related company or group of companies. | | | S11 |
| Category IV: Wealth management entities <i>(Those SPEs created by household entities or groups of individuals to hold or manage wealth or real estates for their owners)</i> | | | | | |
| 4.1 | Companies holding/managing wealth and real estate for individuals and families | Managing family trust funds, foundations, personal holding companies. | Para 4.59 | Para 4.51 | S11, S126, and S127 |
| Category V: Government Owned Financial Entities <i>(Those SPEs created by governments for fiscal activities)</i> | | | | | |
| 5.1 | SPEs owned by governments for fiscal purposes | Raising or borrowing funds on behalf of a nonresident general government. | | Para 8.24 | S11, S12, or S15 |
| Category VI: Other structures <i>(Those SPEs created to conduct any type of transactions other than those covered in the other categories)</i> | | | | | |

Note: The entity types listed may be SPEs, but not all entities of the types listed are necessarily SPEs. The SPE definition and decision tree should assist compilers in determining which entities are SPEs.

Source: IMF, *Special Purpose Entities: Guidelines for a Data Template*.

3. MNEs, SPEs, and Intellectual Property Products (IPPs)

23.40 MNEs often manage intellectual property products (IPPs), which are defined and described in further detail in Chapter 11 [insert reference to relevant paragraphs in *BPM7* Chapter 11/2025 *SNA* Chapter 11]. MNEs increasingly establish SPEs not only to channel financial investments, but also to manage IPPs.

23.41 The intangible nature of IPPs makes the transfer and use of IPPs difficult to observe. Especially for IPP transactions within an MNE group, this nonphysical feature can cause significant measurement difficulties. The main difficulty relates to identifying economic ownership (as opposed to legal ownership), which has repercussions for the

treatment of related flows, namely those related to IPP use.³

- 23.42 Figure [23.5] shows a decision tree which assists in determining the economic ownership of IPPs and IPP-related transactions (including IPP-related import and export flows). The tree represents a sequence of steps, from left to right, guiding the statistics compiler to a decision. The starting point of the tree is the observation of IPP output or IPP ownership at the level of a certain unit. The obtained information is examined in 4 different steps:
- (a) Control/ownership of the unit: Does the unit participate in a global production arrangement as member of an MNE group?
 - (b) Did the unit produce the IPP?
 - (c) What is the main kind of activity of the unit, or is the unit expected to use the IPP in its production process?
 - (d) Does the unit receive revenue related to IPPs, or does the unit pay for the use of IPPs (royalties and licenses)?
- 23.43 Together these steps should lead to a coherent decision on ownership, the recording of capital formation and the recording of IPP-related service flows (including imports/exports). However, it should be acknowledged that the availability of information needed to go through each of these steps may be insufficient. Particularly inside MNE groups, it may be quite challenging to classify IPP-related transactions properly, identifying separately IPP funding, IPP purchases, and sales and payments for IPP use. This means that each situation identified in the decision tree will be provided with a default solution in case information is insufficient to run properly through each of the decisive steps.
- 23.44 The first part of the decision tree describes the situation of units inside MNE groups. In cases where the unit produced the IPP, the observed unit may be a main producer of goods and non-IPP services (1.1.1) or a main IPP producer (1.1.2) serving the IPP needs of the various members of the MNE group. In the case of a main producer of goods and non-IPP services, the (default) decision is to assign economic ownership to the unit in question. It could be that other units inside the MNE group equally benefit from this IPP. However, in such cases, it is recommended that intra-group transactions are only recorded when data sources point at receipts for IPP use by member units.
- 23.45 In case of a main IPP producer, economic ownership of the produced IPP is assigned to this unit (1.1.2.2) unless there is evidence the unit does not generate any IPP-related turnover (e.g., sales of copies, licences to use), or there is evidence of sales of the original to the parent or to other customers (1.1.2.1). No observed IPP-related turnover implies the unit is indirectly funded by the parent. Without conclusive evidence, the default solution is to assign economic ownership to the producing unit (1.1.2.2).
- 23.46 Source statistics may indicate the use or ownership of IPPs, but without the observed unit being identified as the producer of IPPs (1.2). Unless there is evidence of purchases of IPP originals, such units will generally not be considered the economic owners of IPPs. One may expect that payments for IPP use will be observed (1.2.1.1). But even without such payments, it is quite possible that these units use IPPs provided by the MNE parent in their production processes (1.2.1.3).
- 23.47 However, one could also argue that since these units are obtaining the benefits from IPPs, they could alternatively be identified as the actual economic owners inside MNEs. This would require imputing the transfer of the IPP original from the parent to the unit and capitalization of this IPP on the balance sheet of the unit under observation. This is not an easy task, and not without risks. The nature, size, and timing of these flows are principally unknown. This is why such an approach is not recommended under 1.2.1.3.

³ The following paragraphs on determining economic ownership of an IPP observed in global production are based on Chapter 4 of the *UNECE Guide to Measuring Global Production* where additional information can be found.

- 23.48 Case 1.2.2 reflects those units created by MNEs with the purpose of taking advantage of low-tax jurisdictions. The default solution is assigning economic ownership of the IPP to these units, in correspondence with legal ownership. Reassigning economic ownership, and corresponding revenue flows, from the legal owner to some other unit is not recommended. However, revenue received by these legal owners should preferably be shown as an “of which” item with a heading such as “IPP-related services provided by SPEs”, as the provision of these services by SPEs is likely to have very little impact on employment and physical economic activity in the domestic economy. A separate reporting of these IPP services will provide a clearer view on national accounts and balance of payment statistics.
- 23.49 The second part of the decision tree (2) reflects the situation of global production in which a principal and a manufacturer with which it contracts are not part of a common MNE group. In appraising IPP ownership under such conditions, there are typically two situations to consider. In the first situation (2.1.1), the manufacturer owns the IPP and uses it in its production process, which implies the principal is simply obtaining a full-fledged product including the IPP service. In this case, there is no necessity of recording IPP transfers. The principal has no involvement in the manufacturing process and is expected to concentrate its business on trade-related activities. The IPP recording aspects are relatively straightforward: the manufacturer in question invests on own account in IPP and the asset value should be recorded in its balance sheet.
- 23.50 In the second situation, the principal owns the IPP and provides a contractor with its blueprints of the required output (2.1.2). No IPPs, or IPP-related transactions, will need to be identified when observing the contractor’s production activities. The contractor will deliver a product to the principal; however, without reflecting the user costs of the IPP.
- 23.51 The decision tree also reflects the (perhaps hypothetical) situation in which the factoryless producer puts into use the IPPs developed by others (2.2.2.2). Such units will be IPP owners when they purchased the IPP originals. Alternatively, they could use the IPPs owned by dedicated IPP producers.
- 23.52 Outside the scope of MNEs, IPP-related transactions may be observed when dedicated producers provide IPP originals or IPP-related services (2.1.2.1) to those entities in the production chain engaged in manufacturing (2.2.1).
- 23.53 In conclusion, when IPP-related transfers occur outside the domain of MNE groups, such transfers are usually observed from market transactions, and this makes the recording much less complicated. Similarly, the identification of IPP ownership is usually more straightforward when the entities involved do not belong to the same MNE group.
- 23.54 Yet, the analysis of IPP use in production typically requires a complete picture of the global production chain, which will not be obtained from a national input-output table. Alternatively, a worldwide input-output table may show how IPPs are linked, for example via factoryless goods producers, to the global production chain.

Figure 23.5. Decision tree for determining economic ownership of an IPP observed in global production

| Control/ownership of unit | Production of the IPP | Type of producer | Revenue and expenditure related to the IPP | Decision about economic ownership of the IPP | Related decisions |
|---|--|---|---|---|---|
| 1. The unit participates in a global production arrangement as member of an MNE group | 1.1 The unit produced the IPP | 1.1.1. The unit is a main producer of other (non IPP) goods and services and is expected to use the IPP in its production process | 1.1.1. The unit may, or may not, receive funding from the parent as compensation for IPP development costs but this aspect is not decisive. | Attribute by default economic ownership of the IPP to this unit | The IPP is by convention recorded on the balance sheet of this unit, even when other member units of the MNE may benefit from the IPP. |
| | | | 1.1.2.1. The unit does not receive revenue from royalties or licences to use, but either receives compensation for IPP development from the parent or sells the IPP originals to the parent. | Do not attribute economic ownership to the unit. This unit serves as a dedicated IPP producer for the benefit of the MNE as a whole. | Do not record the IPP as fixed capital formation of the unit. Instead record the developed IPP as export to the (foreign) MNE parent. Reported sales of IPP originals may show up in international trade in services statistics. |
| | | 1.1.2. The unit is a main IPP producer. | 1.1.2.2. The unit receives revenue from royalties or licences to use, or does not receive any compensation for IPP development from the parent, so it can be assumed that it is expected to obtain revenue from royalties and licences to use in the near future. | Attribute economic ownership to the unit. The unit functions as a dedicated IPP producer with revenue from units outside the MNE from the IPPs produced. | The IPP is recorded as fixed capital formation of the unit. |
| | | | 1.2.1.1. The unit pays royalties or licences to use. | The unit does not own the IPP | Do not record the IPP as fixed capital formation of the unit. IPP service payments to foreign suppliers are recorded as import of IPP services (or royalties). |
| 1.2. The unit did not produce the IPP | 1.2.1. The unit is a main producer of other (non IPP) goods and services and may use the IPP in production | | 1.2.1.2. The unit purchased the IPP original for use in production | Attribute economic ownership of the IPP to the unit | The IPP is fixed capital formation of the unit. If purchased from abroad register an import of the IPP (original) |
| | | | 1.2.1.3. No IPP related payments are being observed. IPP use may be indirectly observed based on the nature of the production process (with usually high IPP requirements) and above average returns to capital. | The MNE parent is expected to be the economic owner and supplier of the IPPs used in production. | Conceptually, an imported IPP service flow should be recorded. But this is not an easy task (and not without risks) as the nature and size of these flows are principally unknown. Such imputations of imports/exports should preferably be the outcome of a concerted action in which all national statistical institutes (NSI) involved join efforts in filling in the IPP flows between the units of an MNE. |
| | | 1.2.2. The unit is not a producer of other (non IPP) goods and services. Its main output is IPP related. | 1.2.2. Purchase of the IPP from the parent and revenue from royalties and licences to use may, or may not, be observed. | The unit is assumed to have purchased the IPP (original) from the parent and to receive (on behalf of the parent) revenue from royalties or licences to use the IPP. Attribute economic ownership of the IPP to the unit. The unit is considered an IPP holding SPE providing its services to the MNE parent. | It is recommended to classify the fixed capital formation, revenue and expenditure related to these IPP holding SPEs separately to allow analysis excluding "brass plate" units, also because the transactions carried by these units are not necessarily at arm's length. |
| | | | | | |

| <i>Control/ownership of unit</i> | <i>Production of the IPP</i> | <i>Type of producer</i> | <i>Revenue and expenditure related to the IPP</i> | <i>Decision about economic ownership of the IPP</i> | <i>Related decisions</i> | |
|---|--------------------------------|---|--|--|---|--|
| 2. The unit participates in a global production arrangement but not as member of an MNE group | 2.1. The unit produced the IPP | 2.1.1. The unit is a producer of other (non IPP) goods and services and is assumed to use the IPP in production | | Attribute economic ownership of the IPP to the unit | The IPP is fixed capital formation of the unit. | |
| | | | 2.1.2. The unit is a main IPP (or factoryless goods) producer. | | | |
| | | | 2.1.1.1. The unit receives revenue from copies, royalties or licenses to use. | Attribute economic ownership of the IPP to the unit. | The IPP is fixed capital formation of the unit. If royalty payments are received from abroad register these payments as exports of IPP services. | |
| | | | 2.1.2.2. The unit does not receive revenue from copies, royalties or licenses to use the IPP. One may assume that this unit operates as a factoryless goods producer (FGP). | Attribute economic ownership of the IPP to the unit. | The IPP is fixed capital formation of the unit. | |
| | | 2.2. The unit did not produce the IPP. | | 2.2.1.1. The unit pays royalties or licenses to use the IPP | The unit does not own the IPP | Don't include the IPP as fixed capital formation of the unit. If payments to abroad register imports of IPP services |
| | | | 2.2.1. The unit is a main producer of other (non IPP) goods and services and is expected to use the IPP in production | | | |
| | | | 2.2.1.2. The unit purchased the IPP. | Attribute economic ownership of the IPP to the unit. | The IPP is fixed capital formation of the unit. If purchased from abroad register imports of the IPP | |
| | | | 2.2.2.1. The unit receives revenue from royalties or licenses to use the IPP | Attribute economic ownership of the IPP to the unit | The IPP is fixed capital formation of the unit. If revenue is received from abroad register exports of IPP services | |
| | | | 2.2.2. The unit is a main IPP (or factoryless goods) producer. | | | |
| | | | 2.2.2.2. The unit does not receive revenue from IPP related royalties or licenses to use. Instead, payments for IPP use (originals or copies) may be observed. This unit is expected to operate as an FGP. | The economic ownership of the IPP should be judged on the basis of the IPP related transactions observed with this unit. It is possible that the unit makes use of IPP services provided by dedicated IPP producers. | The IPP is fixed capital formation of the unit when the purchase of an original is observed. Otherwise, the unit is expected to purchase IPP services in which case royalty or license payments should be observed. | |

Source: UNECE *Guide to Measuring Global Production* (2015).

D. Measurement Challenges

23.55 MNE and intra-MNE group flows present measurement challenges for the [*SNA/Manual*], which can lead to misinterpretation or, in some cases, even mismeasurement of the values in the accounts. The concepts of residence and economic presence, which are central to macroeconomic statistics, assume a different relevance for MNE groups, for which activities extend across national boundaries. This has increased the complexity of compiling national statistics, as it is more difficult to break down production by economy. The [*SNA/Manual*] treats foreign affiliates of MNEs as residents in their respective economies of operation. This treatment is designed to place production in the economy in which it occurs, which is fundamental for estimating the economy’s GDP and other key balancing items. Furthermore, the existence of distorted transfer pricing on intra-group flows—when prices do not reflect the “arm’s length” exchange values recommended by the [*SNA/Manual*]¹—or the practice of not recording transactions for the intra-group use of intellectual property products may result in the misallocation of production between the economy of the parent company and those of its affiliates (see also Section C). Moreover, in many cases, estimates recorded by MNEs in national statistical surveys may not be best suited to meet the purposes of national accounts and external sector statistics.

23.56 Although the extent of these issues is not easily quantified, the problems are significant because of the growing size and importance of MNE activities. Economic decisions made by MNEs can have a significant effect on macroeconomic statistics. When misinterpreted or mis-measured, these activities can adversely affect the quality of key macroeconomic indicators. The impact on GDP might result from the misallocation between statistics on international trade in goods and services relative to income and the depreciation charges associated with movable corporate assets, especially intangible assets. Consequently, without robustly accounting for MNE group activities, the reliability of macroeconomic statistics for policymaking purposes may be challenged.

1. Allocation of Activities to Different Economies

23.57 With complex global corporate structures and production arrangements dividing activities across many jurisdictions, there arises the issue of the subsequent allocation of these activities to different economies. MNEs are likely to try to maximize their enterprise-wide global after-tax profits rather than their profits in each of the economies in which they operate. Toward this end, they often structure the locations of their operations, the legal ownership of their assets, and the pricing of intra-enterprise transactions in ways that are designed to reduce their global tax liabilities or regulatory burdens. As a result, statistical measures based on MNEs’ business records may be difficult to interpret and for certain types of analysis may even be considered to provide a distorted view of the value of the intra-enterprise transactions and the allocation of activities across economies.

23.58 MNEs can reduce their global taxes through a number of strategies, including using distorted transfer pricing between the parent and its affiliates or among the affiliates to shift profits to lower tax economies; assigning or transferring ownership of IPPs or other movable assets across economies in a manner that reduces tax burdens; interposing a finance or holding company affiliate in a low-tax economy between themselves and their affiliates; establishing offshore factoring corporations in low-tax economies that bill and collect for the parent’s worldwide sales; and inverting the corporate ownership structure, with an overseas affiliate in a low-tax jurisdiction becoming the parent that collects net income for the MNE’s worldwide corporate structure. As explained in [chapter 4, section on transfer pricing], transfer prices may be distorted – that is, incompatible with the valuation principles used in the [*SNA/Manual*] – in which case they should be adjusted to actual market prices. However, because of all the complexities involved to arrive at a consistent recording of the adjustments, national accounts and external accounts often refrain from trying to approximate true market prices (see paragraph 4.160).

23.59 The use of finance or holding company affiliates, factoring corporations, and corporate inversions are not necessarily inconsistent with the principles used in the system, but they may lead to difficulties in compiling and reconciling the statistics and in interpreting the flows reported by the accounts. Complex financing and ownership structures of MNEs can mask ultimate ownership links and inflate (foreign) direct investment flows and positions as each flow into and out of each economy is counted even if the funds, or income, are just passing through. Compilers can provide additional breakdowns to show, for example, the effects of any adjustments made to transfer prices (or of the potential effects of not being able to adjust transfer prices to exchange values) or of other factors

that lead to multinational profits that are not reflected in measured income in the domestic economy. The macroeconomic indicators and supplementary information discussed in Section E of this chapter also help address misinterpretation of the accounts, including by distinguishing between domestically and foreign-controlled corporations.

2. Cross-Border Mobility of Corporate Assets

- 23.60 Cross-border mobility of movable corporate assets, including intangible assets such as IPPs, can make the true location of the generation of profits and value added ambiguous. Because intellectual property products are not physically constrained and the use of an IPP by one part of an MNE group does not prevent the simultaneous use by another part, the MNE can potentially register a previously produced IPP in another economy to maximize the MNE group's overall post-tax profits.
- 23.61 Determining economic ownership of IPPs potentially has a major effect on the recording of assets and related flows in macroeconomic statistics. The creation of IPP assets at one location in an MNE group is quite often funded by affiliates elsewhere in the group. These arrangements are known as cost sharing agreements where the costs associated with research at one location are funded by a number of affiliates across the group.
- 23.62 Section C of this chapter and Figure [23.5] describe the decision tree that should be used to determine the economic ownership of IPPs. It should be emphasized, however, that the measurement of the IPP-related flows within an MNE group, such as recording the sale or transfer of IPP assets or the payment of royalties based on reported transfer prices, could significantly bias the flows shown in the accounts relative to the discounted present value of expected future returns, which unfortunately may not always be available to the compiler. Also, if faulty data are used in implementing the decision tree for determining economic ownership, ownership of IPPs could be attributed to the wrong economy, which would lead to distortions in GDP and other macroeconomic indicators. Furthermore, even when the data underlying the determination of economic ownership and the measurement of IPP flows are correct, in some cases the resulting flows could be surprising to data users and might be inappropriate for certain types of analysis. For example, if a large MNE that produces software originals transfers the ownership of the originals to a low-tax economy, and the global sales of copies of the software are routed through the low-tax economy, this economy could show high value-added in software copies with very little associated employment of labour or remuneration of employees. Some users of the GDP statistics for that economy might consider the statistics to be distorted, or at least to be difficult to interpret in the context of typical business cycle analysis that assumes a strong relationship between GDP and aggregate employment. Moreover, the transfer of the originals themselves poses challenges to the interpretation of net exports and capital formation. If practical, the identification within exports/imports and capital formation of transfers of previously produced IPPs contributes to understanding the role of those transactions in GDP and components.

3. Consistency and Coherence of MNE Group Data

- 23.63 Ensuring that all activity of an MNE group is captured, not duplicated, and properly allocated by economic territory is a statistical challenge since the SNA/*Manual* standards do not view the MNE group as a single entity. If not properly recorded, the activities of MNE groups could result in a misallocation of GDP and, as a result, could distort an economy's macroeconomic indicators.
- 23.64 Inconsistent recording of some transactions of MNE groups can lead to large discrepancies in the accounts. Various data sources used in the compilation of statistics may use different statistical units or definitions and may record data in different ways, making it difficult for the compiler to achieve consistency in the measurement of economic activity. Compilers in some national statistical offices have addressed these issues by focusing attention on large MNEs, endeavoring to coordinate the collection of data from the MNE group, tracking changes in the composition of the group, and conducting coherence analysis to ensure that the data are consistent. The successful pursuit of this strategy requires monitoring and understanding of the business activities of the MNE group, as well as maintaining good communication with representatives of the group. In several countries, these tasks are carried out by specific statistical units, combining the expertise of national accountants, balance of payments experts, and business accountants. Where confidentiality rules allow for it, compilers are also encouraged to exchange data and reconcile the activities of MNE groups with their counterparts in other economies (see paragraph [21.55]).

E. Macroeconomic Indicators and Supplementary Information to Monitor the Impact of Globalization

1. Existing Macroeconomic Indicators

Key Indicators other than GDP

- 23.65 Traditionally, analysis of economic activity within an economy focused on GDP as a broadly defined, internationally consistent measure of productive activity. Considering various economic developments, including increased globalization, the 2025 SNA has given increased prominence to other key indicators, such as gross/net national income (GNI/NNI), gross/net national disposable income (GNDI/NNDI), and household (adjusted) disposable income. These indicators are generally less affected by globalization and less sensitive to the impact of MNE activities than GDP. This is an important factor to consider, especially for economies with significant MNE presence. As such, indicators other than GDP may better reflect the impact of the underlying economic activities of MNEs on an economy's residents.
- 23.66 To illustrate these differences, consider a direct investment affiliate that is wholly owned by a foreign parent and is engaged in capital-intensive production. Because the production process is capital-intensive, most of the value added accrues as operating surplus to the foreign parents, perhaps primarily as reinvested earnings on foreign direct investment, whereas only a relatively small part of the value added remains in the domestic economy as remuneration of employees. Similarly, if an MNE engages in distorted transfer pricing to boost the income of an affiliate in a lower tax economy and it is not possible to replace the distorted transfer prices with exchange values in the compilation of the accounts, the transfer pricing will have less effect on GNI than on GDP. In both cases, comparing GDP with GNI, GDP includes the full value added, whereas GNI excludes the property income that accrues to foreign investors, whether in the form of dividends or interest that are repatriated to the parent or in the form of reinvested earnings on foreign direct investment. The GNI comes closer to measuring the economic flows that are retained by the economy's residents.
- 23.67 Similarly, net measures such as net national income (NNI) will tend to better capture the impact of MNE activities on domestic residents than the gross measure. [Insert reference to relevant paragraphs on net measures] For example, consider an economy to which an MNE relocates a large amount of IPPs. The IPP generates on-going production and income in the form of royalties or license fees, which directly feed into the measurement of GDP. GNI excludes the property income that accrues to foreign investors, but NNI goes one step further by also considering the depreciation that is associated with the IPP. If an MNE affiliate engages in activities that result in the depletion of mineral and energy resources, the depletion is now also reflected in NNI (but not in GNI). Similarly, the depletion of biological resources is deducted in the calculation of NNI, whereas the regeneration of biological resources is recorded as an addition to GDP, GNI, and NNI.
- 23.68 When current transfers represent a large share of an economy's income, net national disposable income (NNDI) can provide a better measure of the income available to residents for consumption or saving. Furthermore, when interest is focused primarily on the material well-being of households, indicators such as net household (adjusted) disposable income may provide the best summary of economic conditions. The latter indicators are hardly affected by the activities of MNE groups; basically, only the remuneration from being employed by the domestic affiliates of the MNE group feeds into household (adjusted) disposable income.

2. Supplementary Data

Additional Granularity in the Institutional Sector Accounts and External Accounts, including Special Purpose Entities

- 23.69 The institutional sector accounts show the full sequence of economic accounts from output and value added to net lending and borrowing, the financial accounts, and the resulting balance sheets for institutional sectors. Adding

granularity to these accounts and the external accounts based on ultimate control and ownership of corporations can highlight the full impact of MNE activities in the macroeconomic accounts and highlight not only foreign-controlled enterprises but also the domestic enterprises that are part of MNE groups. Because of the data intensity involved, it is recommended that the increased granularity be limited to the nonfinancial corporations sector and the financial corporations sector, and that the breakdown of MNE groups is not needed for any subsector.

23.70 For economies for which SPEs have a significant presence, it is recommended that SPEs be separately identified as “of which” items within the [institutional sector accounts]/[external accounts]. Separate identification of SPEs is important for better understanding the contribution of SPEs from both the national and external accounts perspective. For economies for which SPEs are significant, it is recommended that the presentation of the institutional sector accounts with enhanced granularity identify SPEs as an “of which” supplementary category for foreign-controlled financial and non-financial corporations.

23.71 Figure [23.6] [Note: if the table shown in Figure 23.6 appears in SNA Chapter 5/BPM7 Chapter 4, it should be referenced here] provides a template for the breakdown of the nonfinancial and financial corporations sector by domestic multinational corporations and foreign-controlled corporations as well as “of which” categories for SPEs.

Figure 23.6. Template for Institutional Sector Accounts and External Accounts with Additional Granularity and SPEs

| Nonfinancial Corporations | | | | | | | |
|---------------------------|---|----------------------------------|--|--|--|--|--|
| Total | Domestically controlled nonfinancial corporations | | | | | Foreign-controlled nonfinancial corporations | |
| | Total | Public nonfinancial corporations | Of which: Public nonfinancial corporations that are part of domestic MNE groups | National private nonfinancial corporations | Of which: National private nonfinancial corporations that are part of domestic MNE groups | SPEs | |
| S11 | S11DO | S11001 | S110011 | S11002 | S110021 | S11003 | |

| Financial Corporations | | | | | | | |
|------------------------|--|-------------------------------|---|---|---|---|--|
| Total | Domestically controlled financial corporations | | | | | Foreign-controlled financial corporations | |
| | Total | Public financial corporations | Of which: Public financial corporations that are part of domestic MNE groups | National private financial corporations | Of which: National private financial corporations that are part of domestic MNE groups | SPEs | |
| S12 | S12DO | S12001 | S120011 | S12002 | S120021 | S12003 | |

Supplementary (Foreign) Direct Investment Statistics

- 23.72 The increasingly complex financing and ownership structures of MNE groups, driven by many factors such as tax optimization or labour and transport cost reduction, play an important role in direct investment relationships. (Foreign) direct investment often involves MNEs channeling investments through several economies, resulting in a large portion of direct investment flows in some economies being flows going in and out of the economy on their way to their final destination. This can make it difficult to interpret direct investment statistics and does not show the ultimate sources and destinations of direct investment when the statistics are compiled by immediate partner economy. Supplementary presentations of direct investment statistics, by ultimate investing economy, by ultimate host economy, etc., can help address these challenges. These supplementary statistics are covered in detail in [Annex 6 on Selected Issues on Direct Investment/ *BPM7* Annex 6, Selected Issues on Direct Investment] and the *OECD Benchmark Definition of Foreign Direct Investment*.

Supplementary Presentation of Trade and Investment Income

- 23.73 To develop indicators on GVCs and to better identify the role of MNEs in current account [international] transactions, a supplementary presentation of trade and investment income by characteristics of the enterprise, including ownership (e.g., domestically controlled or foreign-controlled) and size, is recommended. These indicators are not only useful for understanding international transactions by characteristics of the enterprise, but also for national accounts more generally, such as for the extended supply and use tables discussed in paragraphs [23.78-23.80].
- 23.74 Economies are encouraged to compile data on goods trade by enterprise characteristics (TEC) and services trade by enterprise characteristics (STEC). Many economies have added information on whether the enterprise is foreign or domestically owned to their TEC and STEC statistics. These statistics can answer questions such as: What kind of enterprises are behind the trade flows of goods and services? What is the share of small and medium-sized enterprises in total trade? What is the share of enterprises that trade with a certain partner economy and the amount of trade value they account for? These statistics can enable compilers to prepare a supplementary presentation that disaggregates exports and imports of goods and services and external flows of investment income broken down by ownership, size-class of enterprises, trading partner, product, and industry.
- 23.75 Table [23.2] provides a template for this supplementary presentation. The main breakdown is by domestic versus foreign ultimate control. The template also calls for the identification of small and medium-sized enterprises (SMEs) that employ fewer than a threshold of a given number of employees. Many economies use the threshold of fewer than 250 employees. This threshold is encouraged to enhance international comparability, but other thresholds could also be considered. In cases where the underlying data are not collected or available at the enterprise level (for example, imports of goods or services by individuals), the transactions should be reported as “Unknown”. It will be beneficial to further divide SMEs into independent SMEs (i.e., not a part of a group) and those that are part of a group to try to identify the SMEs that might benefit from capital inputs of affiliated parties.
- 23.76 While the template represents a recommended level of disaggregation, some economies may be able to provide further disaggregation along certain dimensions, whereas in other cases economies may not be able to provide the recommended level of disaggregation because of their own confidentiality criteria for disseminating the information or lack of detailed data. However, the most economically relevant breakdown possible should be considered when publishing these statistics.

Table 23.2. Template to Identify the Role of Enterprise Characteristics in the Current Account

| | Total | By trading partner | | By product | | By industry | |
|-------------------------------------|-------|------------------------|-------------------|------------------------|--------------------|--------------------------|----------------------|
| | | Each of top 5 partners | Rest of the world | Each of top 5 products | The other products | Each of top 5 industries | The other industries |
| TEC Balance of payments statistics | | | | | | | |
| 1.A Export of goods and services | | | | | | | |
| Export of goods and services, total | | | | | | | |
| 1.A.a Goods, BOP basis | | | | | | | |
| By enterprise's ownership | | | | | | | |
| Domestically controlled | | | | | | | |
| MNE | | | | | | | |
| Other | | | | | | | |
| Controlled from abroad | | | | | | | |
| Unknown | | | | | | | |
| By enterprise's size | | | | | | | |
| SME | | | | | | | |
| Independent | | | | | | | |
| Part of a group | | | | | | | |
| Large enterprises | | | | | | | |
| Unknown | | | | | | | |
| 1.A.b Services, BOP basis | | | | | | | |
| By enterprise's ownership | | | | | | | |
| Domestically controlled | | | | | | | |
| MNE | | | | | | | |
| Other | | | | | | | |
| Controlled from abroad | | | | | | | |
| Unknown | | | | | | | |
| By enterprise's size | | | | | | | |
| SME | | | | | | | |
| Independent | | | | | | | |
| Part of a group | | | | | | | |
| Large enterprises | | | | | | | |
| Unknown | | | | | | | |
| 1.B.2 Receipts of investment income | | | | | | | |
| By enterprise's ownership | | | | | | | |
| Domestically controlled | | | | | | | |
| MNE | | | | | | | |
| Other | | | | | | | |
| Controlled from abroad | | | | | | | |
| Unknown | | | | | | | |
| By enterprise's size | | | | | | | |
| SME | | | | | | | |
| Independent | | | | | | | |
| Part of a group | | | | | | | |
| Large enterprises | | | | | | | |
| Unknown | | | | | | | |
| 1.A Import of goods and services | | | | | | | |
| Import of goods and services, total | | | | | | | |
| 1.A.a Goods, BOP basis | | | | | | | |
| By enterprise's ownership | | | | | | | |
| Domestically controlled | | | | | | | |
| MNE | | | | | | | |
| Other | | | | | | | |
| Controlled from abroad | | | | | | | |
| Unknown | | | | | | | |
| By enterprise's size | | | | | | | |
| SME | | | | | | | |
| Independent | | | | | | | |
| Part of a group | | | | | | | |
| Large enterprises | | | | | | | |
| Unknown | | | | | | | |
| 1.A.b Services, BOP basis | | | | | | | |

| | | | | |
|---|--|--|--|--|
| By enterprise’s ownership Domestically controlled MNE Other Controlled from abroad Unknown By enterprise’s size SME Independent Part of a group Large enterprises Unknown 1.B.2 Expenditures of investment income By enterprise’s ownership Domestically controlled MNE Other Controlled from abroad Unknown By enterprise’s size SME Independent Part of a group Large enterprises Unknown | | | | |
|---|--|--|--|--|

Other Supplementary Balance of Payments Statistics

23.77 Detailed balance of payments statistics are useful for the analysis of GVCs (see below). In particular, reporting of the following items is encouraged: total value of re-exports and main product and/or partner breakdown; total value of goods acquired or sold under merchanting and the main products and/or major trading partners; a reconciliation table between international merchandise trade statistics and balance of payments goods statistics; product and partner breakdown of total trade in goods on a balance of payments basis and geographical breakdown of Extended Balance of Payments Services categories.

a. Extended Supply-Use Tables

23.78 Extended supply and use tables (eSUTs) are extended tables designed to provide more granularity regarding transactions associated with globalized production processes in a flexible manner that allows for a number of possible extensions. This additional granularity can support the compilation of Trade in Value Added (TiVA) and GVC thematic accounts. Extensions may include details on origin (imports), destination (exports), goods for processing, and re-exports, as well as breakdowns by firm such as by size-class of firm, trading status (e.g., export orientation), or control (e.g., foreign controlled or domestic entities that are part of an MNE group). The details on control may be identified by trade-by-enterprise characteristics (TEC) and services-trade-by-enterprise characteristics (STEC) data. Other possible extensions may include links to the generation of income accounts, employment statistics, and greenhouse gas emissions.

23.79 Various eSUT extensions can capture important differences in the input and output structure of different producers in the same industry that are absent from conventional supply and use tables and input-output tables. Under the eSUT approach, as with other extended tables and thematic accounts, economies can implement them according to their own priorities and resources in a way that is most relevant to their specific needs, circumstances, and data availability. The objective of eSUTs is to create an integrated accounting framework that can link disparate data sources such as structural business statistics, trade-by-enterprise characteristics (TEC and STEC), foreign affiliate trade statistics, and trade data in a coherent framework. The eSUTs should be parsimonious in construction—that is, it is not necessary to break down all activities into more homogeneous groups. Like the GVC thematic accounts, the eSUTs only need to focus on selected activities. Compilers can focus on the industries and/or products where extra granularity is needed in the context of analyzing their economy. If there is no foreign presence in a given industry, then there is no granularity to be added.

- 23.80 The data collected for the supplementary presentation of trade and investment income described in paragraphs [23.73–23.76] can help improve the quality of eSUTs, GVC thematic accounts, and TiVA estimates. eSUTs build on national supply and use tables and input-output tables through the integration of more detailed data provided via MNE surveys, surveys for the balance of payments purposes, tax data, integrated business statistics, and reconciled trade statistics, among others. The eSUTs provide a holistic, integrated view to better understand the complexities and interactions in measuring the effects of globalization on production processes. They can also serve as useful and important inputs in the compilation of TiVA statistics and GVC thematic accounts. Detailed discussions and recommendations for eSUTs can be found in the *OECD Handbook on Extended Supply and Use Tables*.

3. Alternative Presentations

Alternative Presentation of Reclassified Special Purpose Entities

- 23.81 Economies in which SPEs are deemed to be especially important are encouraged to consider a voluntary option of extending the sequence of economic accounts by compiling a supplementary presentation of SPEs reclassified from their economies of legal incorporation to the economies of their parents. Although this alternative presentation is outside the [*SNA/Manual*] conceptual framework, it would allow users to see the effects of consolidating the flows of SPEs with the other flows of parents, giving users an idea of the effects of pass-through flows within MNEs on core macroeconomic indicators. Presenting SPE statistics on a nationality basis would be a complement to the residency-based statistics and not a substitute. Compiling these supplementary statistics should be considered only for economies for which SPEs are deemed important, particularly where resident MNEs set up many foreign SPEs or non-resident MNEs set up many resident SPEs. This supplementary approach of compiling macroeconomic aggregates is considered too ambitious and resource intensive to implement consistently across economies in which SPEs are not deemed important.

4. Statistics on the Activities of Multinational Enterprises

References:

Eurostat, *Recommendations Manual on the Production of Foreign Affiliates Statistics*.

Organization for Economic Cooperation and Development (OECD), *OECD Benchmark Definition of Foreign Direct Investment*.

OECD, *OECD Handbook on Economic Globalisation Indicators*

United Nations, *Manual on Statistics of International Trade in Services*

[*Summary version of subsection for 2025 SNA*]

- 23.82 To complement statistics on foreign direct investment and other globalization indicators, information on foreign-controlled enterprises is also provided through statistics on the Activities of Multinational Enterprises (AMNE statistics) and the closely related Foreign Affiliates Statistics (FATS). AMNE statistics cover a range of variables on foreign direct investment enterprises. This wider dataset is compiled separately from balance of payments and international investment position statistics (although the data may be collected in the framework of compiling foreign direct investment), as the data relate to the overall holdings and activities of foreign direct investment enterprises rather than just the direct interrelations (positions and transactions) by them with related enterprises. That is, the objective of AMNE statistics is to provide an additional perspective on the impact of foreign direct investment that is complementary to data on international flows and positions.
- 23.83 AMNE statistics cover those foreign direct investment enterprises in which the direct investor (or a group of investors in combination) directly or indirectly holds or controls a majority of the voting power (i.e., subsidiaries). This coincides with the scope of foreign controlled corporations in the SNA but differs from the scope of foreign direct investment enterprises due to the exclusion of associates.

- 23.84 For statistics on foreign-controlled enterprises in the compiling economy (inward AMNE statistics), the geographical attribution should be by the economy of the ultimate controlling parent. However, to facilitate links with foreign direct investment data, compilers are encouraged to also provide some data in which attribution is based on the economy of the immediate investor (that is, the first foreign parent). Statistics for foreign enterprises controlled by foreign direct investors resident in the compiling economy (outward AMNE statistics) should be attributed based on the location of the enterprises whose activities are being described. Ideally, all AMNE variables should be attributed on the basis of the industrial activities of the establishment or enterprise, according to the United Nations *International Standard Industrial Classification of All Economic Activities* (ISIC). In addition, particular variables such as sales or output, exports, and imports may be attributed by the types of products produced and sold.

[Full version for BPM7]

Introduction

- 23.85 To complement statistics on direct investment and other globalization indicators, information on foreign-controlled enterprises is provided through statistics on the Activities of Multinational Enterprises (AMNE statistics) and the closely related Foreign Affiliates Statistics (FATS). AMNE statistics cover a range of variables on direct investment enterprises, as described below. This wider dataset is compiled separately from balance of payments and international investment position statistics (although the data may be collected in the framework of direct investment compilation), as the data relate to the overall holdings and activities of direct investment enterprises rather than just the direct interrelations (positions and transactions) by them with related enterprises. That is, the objective of AMNE statistics is to provide an additional perspective on the impact of direct investment that is complementary to data on international flows and positions. This section is designed to give an overview of the nature and compilation of AMNE statistics for the information of balance of payments compilers and users who may be considering this extended range of information.
- 23.86 AMNE statistics may be produced for both foreign-controlled enterprises in the compiling economy (a subset of inward direct investment; so-called “inward AMNE statistics”) and foreign affiliates controlled by MNEs in the compiling economy (a subset of outward direct investment; so-called “outward AMNE statistics”). In addition, outward AMNE statistics also may cover the activities of resident direct investors.
- 23.87 AMNE statistics can be important for the analysis of the performance of domestically and foreign-controlled enterprises, both in absolute terms and relative to the larger domestic and foreign universes of enterprises. Direct investment enterprises may be involved in activities such as research and development that benefit the domestic economy but may not be recorded as balance of payments transactions. Also, data on transactions in goods and services (with both residents and nonresidents) can provide an additional perspective to balance of payments data, as transactions by direct investment enterprises with unrelated persons could be significant.
- 23.88 Detailed discussion and recommendations for measuring AMNE and for FATS is found in the *Manual on Statistics of International Trade in Services*,⁴ in the *OECD Handbook on Economic Globalisation Indicators*, and in the *OECD Benchmark Definition of Foreign Direct Investment*. A summary is provided here.

Coverage

Universe or population

- 23.89 AMNE statistics cover the subset of direct investment enterprises in which the direct investor (or a group of investors in combination) directly or indirectly holds or controls a majority of the voting power (i.e., subsidiaries). This differs from the scope of direct investment enterprises due to the exclusion of associates. AMNE statistics follow the definition of direct investment discussed in this *Manual* (paragraphs [6.8]–[6.24]) in that coverage is defined as those enterprises with majority foreign ownership of the voting power by a single investor or a group of

⁴ The *Manual on Statistics of International Trade in Services* focuses on foreign affiliates producing services, but notes that most of its recommendations (all other than those related to industry/product groupings) for compiling these statistics are equally applicable to goods and services.

investors acting together. Only those enterprises with foreign control are covered in AMNE statistics, thereby corresponding to the coverage of foreign-controlled corporations in Figure 23.6.

Economic variables for AMNE statistics

- 23.90 Basic variables of substantial interest may include: sales (turnover) and/or output; employment; value added; exports and imports of goods and services; and number of enterprises.
- 23.91 Other variables that might be collected to supplement these data include: assets (both financial and nonfinancial); remuneration of employees; net worth; net operating surplus; gross fixed capital formation; taxes on income; research and development expenditures; total purchases of goods and services; and intra-group exports and imports.
- 23.92 The definitions of these variables are given in the *2025 SNA* and in the documents referenced above. It is also useful to have data for the total population of enterprises, or for the domestically-controlled enterprises on the same basis as AMNE statistics on inward direct investment, so performance can be compared with foreign-controlled enterprises.

Statistical Units

- 23.93 In principle, most AMNE statistics could be collected at the enterprise group or enterprise level, or the level of individual business locations or establishments. Some indicators, such as total assets, are more naturally collected from enterprise groups or enterprises than from establishments. Direct investment statistics are usually collected from enterprise groups or enterprises, so collection of AMNE statistics at this same level facilitates linkages between the two types of data. However, because enterprise groups and enterprises are more likely than establishments to have activities in multiple industries, data that are classified on the basis of primary activity can be more difficult to interpret for enterprise groups and enterprises than for establishments. There are thus advantages and disadvantages associated with every basis of collection, and no recommendation is made as to the appropriate statistical collection unit. AMNE statistics will often be developed in the context of existing statistical systems, in which the statistical units are already defined, and in these cases there may be little choice in the units used.

Time of Recording and Valuation

- 23.94 Time of recording and valuation are consistent with the *Manual*. Flow variables, such as output or value added, should cover the whole of the reference period (usually a year), and should be measured on an accrual basis. Stock variables, such as assets and net worth, should be as at the end of the reference period. All transactions and positions variables in principle should be measured at market value.

Attribution of AMNE Variables

Geographic

- 23.95 For statistics on foreign-controlled enterprises in the compiling economy (inward AMNE statistics), the geographical attribution should be by the economy of the ultimate controlling parent. However, to facilitate links with direct investment data, compilers are encouraged also to provide some data in which attribution is based on the economy of the immediate investor (that is, the first foreign parent). Statistics for foreign enterprises controlled by direct investors resident in the compiling economy (outward AMNE statistics) should be attributed based on the location of the enterprises whose activities are being described.

By activity and by product

- 23.96 Ideally, all AMNE variables should be attributed on the basis of the industrial activities of the establishment or enterprise, according to the United Nations *International Standard Industrial Classification of All Economic Activities* (ISIC).

- 23.97 In addition, particular variables such as sales or output, exports, and imports may be attributed by the types of products produced and sold. Data on a product basis would identify the specific types of goods and services delivered through foreign-controlled enterprises and could most readily be compared with data on goods and services delivered through trade between residents and nonresidents, and to domestic output. However, some variables, such as value added and employment, do not readily lend themselves to a product classification.
- 23.98 As a longer-term goal, compilers are encouraged to work toward disaggregating, by product, some or all of the variables that lend themselves to this basis of attribution (such as sales (turnover) or output, exports, and imports). Product-based statistics are free of problems of interpretation related to secondary activities and are consistent with the basis of classification used for trade in goods and services in the balance of payments.

Compilation Issues

- 23.99 There are two basic approaches, not necessarily mutually exclusive, to developing AMNE statistics. The first is to conduct surveys that directly request information on the operations of the covered enterprises (appropriate for both inward and outward AMNE statistics). The second identifies the subset of existing domestic enterprise data that is accounted for by foreign-owned firms (for inward AMNE statistics only). Direct investment registers may be used in either case to identify the units to be covered (as well as the economy of attribution, in the case of inward AMNE statistics). The collection of data for inward AMNE statistics can also be combined with the collection of data for supplementary data on foreign-controlled corporations in the external accounts.
- 23.100 For both inward and outward AMNE statistics, questions about key AMNE variables might be added to existing surveys of direct investment transactions and positions. However, because direct investment surveys may be conducted more frequently than AMNE statistics are required (for example, quarterly rather than annually) and require a quick turnaround, and also because AMNE statistics are needed for only the controlled portion of the direct investment universe, separate surveys may be a more appropriate way to proceed.
- 23.101 For inward AMNE statistics, it should be possible to link the direct investment statistics to the existing domestic economic statistics (for example, as collected for national accounts purposes) through the use of information on ownership structure to identify those resident enterprises that are foreign-controlled, as well as identifying the residence of the owner. AMNE statistics would be obtained as an aggregation of statistical variables across the foreign-controlled statistical population.
- 23.102 Additional questions may have to be added to direct investment surveys if information on the ultimate controlling parent is to be obtained.

F. Analytical Tools

- 23.103 The parts and components that make up a final product, whether a good or a service, are increasingly produced in different economies. Therefore, intermediate goods and associated services may cross national borders several times before they are assembled and sold as a final product. Moreover, international trade in goods and services is often intra-group trade, organized and led by MNEs.
- 23.104 Policy demand for more statistical information on GVCs has grown significantly over recent years. Production fragmentation has deepened the divergence between gross flows, as recorded by traditional international trade statistics, and the data on production and final demand as accounted for in national accounts. This section introduces analytical tools that have been developed to better understand the relationship between globalization and the domestic economy.

b. Trade in Value Added Indicators

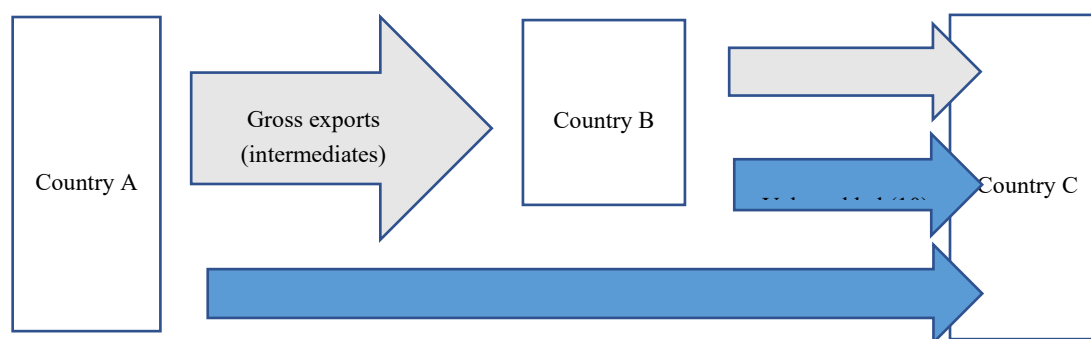
References:

OECD (2021), *Guide to OECD's Trade in Value Added Indicators: 2021 Edition*.

United Nations Economic Commission for Europe (UNECE) (2015), *UNECE Guide to Measuring Global Production*

- 23.105 Trade flows are generally reported on a bilateral gross basis—that is, an economy will report its exports and imports with each of its trading partners each time a change of ownership occurs. When the production process is fragmented across multiple economies, these bilateral gross trade flows taken by themselves may present a distorted view of the ultimate location of production.
- 23.106 Consider the example shown in Figure [23.7]. Country A exports goods produced entirely within A, to Country B, which further processes them before exporting them to Country C where they are consumed. The value added of A is 100 (the same as the value of the exports), and B adds value of 10 to the goods, thus exporting 110 to C. Trade statistics show total global exports and imports of 210, but only 110 of value added has been generated in their production. The bilateral gross flows show C importing 110 from B and no trade at all with A, even though A is the main source of value added in the goods that C is importing from B. Note that C's trade deficit with the world is 110, and the gross trade flows suggest that the deficit is entirely due to its trade with B, even though most of the income associated with the imports of the good ultimately flow to A. The bilateral gross trade flows and any deficit or surplus associated with those flows are likely to provide a misleading picture of the location of production and the ultimate benefits or harms resulting from international trade.

Figure 23.7. Inflated gross flows of trade



Source: UNECE *Guide to Measuring Global Production* (2015).

- 23.107 Several handbooks, guides, and statistics have been published since the last update of the [*SNA/Manual*] to better address the statistical challenges in understanding the nature of global production.⁵ The TiVA approach addresses the double counting implicit in gross flows of trade. TiVA measures the value that is added by each economy and industry in the production of goods and services that are traded and consumed worldwide.
- 23.108 The TiVA information thus incorporates information about the entire global value chain, providing information that policy makers can use to understand the global effects of their economy's trade flows, potentially impacting policies regarding the effects of trade on growth and competitiveness, global imbalances, macroeconomic shocks, employment, and the environment.

⁵ For example, see OECD (2021), *Guide to OECD's Trade in Value Added Indicators: 2021 Edition*. International and regional organizations have also compiled regional versions of TiVA accounts for Europe, Asia, and North America.

- 23.109 The TiVA measurement model involves compiling a worldwide input-output table, which combines national supply and use tables with trade statistics. The worldwide input-output table enables the tracking of exports of one economy that are used as intermediate consumption in an industry of a second economy. The worldwide input-output table also includes columns that record the final demand in each economy and rows that record taxes less subsidies on products, value added at basic prices, and output for each industry in each economy.⁶
- 23.110 Among the key indicators provided by the TiVA statistics are the domestic content of an economy's exports (that is, the domestic value added of exports as a percentage of total gross exports), a decomposition of an economy's gross exports by source economy in value added terms, and a similar decomposition of an economy's gross imports by source economy in value added terms. It is also possible to decompose the value-added content of exports by goods and services value added. Finally, these decompositions often show that a portion of the value added of imported intermediate goods reflects an economy's own domestic value added (from an earlier stage in the global value chain) that has "returned" to the economy.
- 23.111 Granular TiVA statistics can be computed using eSUTs (see paragraphs [23.78-23.80]). Because TiVA estimates rely on supply and use (or input-output) tables from multiple economies, they have generally been compiled by international or regional organizations. Nevertheless, national statistics are the ultimate source of the data used in their compilation, and international cooperation is required in providing the data at the required level of detail. Where sufficiently detailed data are not available, the compiler necessarily has to make several assumptions. Efforts to improve the quality of national data on global value chains has contributed to the next analytical tool, the global value chain thematic account.

c. Global Value Chain Thematic Account

Reference:

United Nations, Department of Economic and Social Affairs, Statistics Division (2021), *Accounting for Global Value Chains: GVC Satellite Accounts and Integrated Business Statistics*, Studies in Methods, Series F no. 120.

- 23.112 GVCs, coordinated and headed by lead firms, represent interlinked core production activities and supporting activities to produce a final product. GVCs consist of the full range of activities that firms and workers do to bring a product from its conception to its end use. This includes activities such as research and development, production, transportation and distribution, marketing and sales, and after-sales services to the final consumer. While one cannot fully see the activities of GVCs in conventional national accounts statistics, a GVC thematic account uses a bottom-up approach that looks at a specific production chain within the framework of national accounts.
- 23.113 The United Nations Handbook, *Accounting for Global Value Chains: GVC Satellite Accounts and Integrated Business Statistics*, highlights the role of a GVC thematic account approach that can be used to identify and articulate a GVC for a specific product or group of products produced within a GVC. The GVC thematic account consists of GVC-specific supply and use tables (SUTs), either national or multi-country, based on an enterprise-centered approach. It combines integrated and more detailed business statistics and information on business lines and functions and GVC-specific institutional sector accounts. Accordingly, it includes production, including generated income and employment, investment income, and investment (both nonfinancial and financial), and provides information on balance sheets. This level of detail is not readily available in the existing accounting presentation at the level of sectors or sub-sectors that contain the activities of significant GVCs in an economy.
- 23.114 National (or multi-country) GVC-specific accounts would be compiled from national supply and use tables. The scope of the GVC and the identification of the firms participating in the supply chain of the GVC must first be determined by the compilers. The integration of information starts from the compilation of national supply and use tables with a common breakdown of industries and products. The breakdown at industry level explicitly identifies the relevant International Standard Industrial Classification (ISIC) divisions and groups for the GVC. Similarly, the breakdown at the product level explicitly identifies the GVC-relevant products. However, there are significant

⁶ A more complete description of the construction of TiVA statistics is available in Chapter 7 of the UNECE *Guide to Measuring Global Production*.

additions required for a comprehensive GVC analysis as outlined in the United Nations Handbook.

- 23.115 A global enterprise can organize its core production activities (production of goods and services to be sold in the market) in a number of different business lines. Such an enterprise could be a lead firm for various GVCs in different specific industries. Therefore, business, trade, and investment data for a GVC thematic account would need to be collected from the business line of a global enterprise to allow for the correct data specification of the industry-specific GVCs controlled by the lead firm. The enterprise or enterprise group would be able to delineate the statistical units in each of its business lines and further by each business function. The activities of the lead firm are recorded in the country of its residence. In addition, in order to reflect the governance structure in the supply and use tables, there should be a further breakdown of the firms in the ISIC categories that correspond with the business functions of a GVC undertaken in the economic territory to reflect if the firm is foreign controlled or nationally controlled and if the firm is part of the GVC or not.
- 23.116 In a similar way, the list of standardized products explicitly identified in the GVC-specific accounts reflects the GVC-related products which include the final product of the GVC and the intermediate goods and services that are used to produce the final product. Finally, because of the multi-country nature of the GVCs, the trade of these products between the GVC partner countries would also be explicitly shown.
- 23.117 The GVC thematic accounting framework is a flexible approach that can be implemented depending on an economy's needs and interests without overburdening or reducing the accuracy or consistency of the national accounts. In other words, GVC thematic accounts may focus on a single country or, preferably, expand to multi-country accounts with major GVC partners. Flexibility also applies in choosing one or more industries to focus on, with the selection based on the economic importance or dominance of the industry in the domestic economy and partner country markets. Moreover, GVC thematic accounts may comprise only one or several GVC-specific SUTs of interest, but preferably it will also include the GVC-specific institutional sector accounts.
- 23.118 Compilers can choose to focus on the most relevant GVCs for their economy based on their relative importance in terms of value added to the national economy, international investment, and trade relations, and/or to address specific policy questions. GVC thematic accounting aims to address the implicit homogeneity assumption among firms by deconstructing their contributions in the fragmented production process across multiple countries. Large firms, for example, capitalize on economies of scale, whilst affiliated firms may also have different production processes and different cross-border trade relationships than non-affiliated firms.

Chapter 16. Digitalization

(New SNA/BPM chapter)

Chapter 22: Digitalisation

BPM7 Chapter 16 – Digitalisation

(new chapter)

Note: This draft chapter has been prepared jointly to cover the full range of topics to be included in the SNA and BPM chapters on digitalization. Only those issues that are relevant for external sector statistics will be included in the BPM; likewise, only those issues that are relevant to national accounts will be included in the SNA.

A. INTRODUCTION

- 22.1 Falling costs and rising capabilities to process, transmit, and store digitized data have resulted in the extensive integration of digital technology into goods and services and the activities of production and consumption. This transformation of economic activity and daily life through the pervasive application of digital technology is referred to as digitalization. Digitalization has been enabled by information and communications technology (ICT) goods and services, including the internet, semiconductor chips, computing and electronic communication equipment, software, and wireless digital telecommunication services.
- 22.2 A wide variety of digital products and activities have appeared as part of digitalization, and digital assets, (defined as assets that exist only in digital form such as crypto assets) and data and software have assumed important roles as stores of wealth or inputs in production. The profound impact of digitalization on production, consumption, transacting, investment, prices, finance, and other aspects of the economy, as well as its impact on international trade in goods and services and other cross-border transactions, calls for enhanced visibility of digital activities, products, and transactions in the macroeconomic accounts. Guidelines are therefore needed on measuring the activities, products, and assets associated with digitalization in the conceptual framework of the SNA/BPM and on enhancing the visibility of digital activity and products in the macroeconomic accounts.
- 22.3 Measurement issues associated with digitalization, or that touch on digitalization, are also discussed in other chapters of the SNA/BPM and in other manuals. To increase the visibility of digitalization, chapter 11 of the Balance of Payments and International Investment Position Manual, recommends showing computer and information services as a first-level services category in the balance of payments current account. The capital account chapter in the SNA and the chapters on goods and services account in the BPM discuss the main types of nonfinancial assets that have enabled or resulted from digitalization, which include ICT equipment, software, data and databases, crypto assets without a corresponding liability, and digital elements of research and development. The financial accounts chapter of the SNA and the chapter on classification of financial assets and liabilities in BPM discuss classification of crypto assets with a corresponding liability and electronic money (e-money). The SNA chapter on measuring prices, volumes and productivity discusses measurement challenges that affect products associated with digitalization, such as adjusting price comparisons for quality change.

Finally, the 2023 edition of the [Handbook on Measuring Digital Trade](#) discusses digital intermediation platforms and other aspects of trade affected by digitalization and the [OECD Handbook on Compiling Digital Supply and Use Tables](#) discusses tools to increase the visibility of digitalization in macroeconomic accounts.

- 22.4 To provide a consolidated view of measuring and reporting on key aspects of digitalization, and to cover additional aspects of digitalization, this chapter considers the main conceptual and measurement issues presented by the products, activities, and assets, including related cross-border transactions, that have emerged as part of digitalization and recommends tools for increasing the visibility of digitalization in national accounts/external sector statistics. The rest of this chapter is organized as follows. Section B introduces digital transactions, industries and products. Section C discusses digital platforms, including non-financial digital intermediation platforms along with free online platforms and other free products associated with digitalization. Section D discusses digitalization and the financial system, with subsections on new financial services and means of payment enabled by digitalization, financial digital platforms, and fungible digital assets, including crypto assets. These sections (B, C, and D) also highlight the issues relevant for external sector statistics. Section E provides an overview of the issues and challenges presented by digital products for the measurement of prices and volumes and their solutions. Section F concludes the chapter with a section on analytical tools to increase the visibility of digitalization, including a thematic account based on the digital supply and use tables (SUTs), and an extended account showing an alternative treatment of the consumption of free services of digital platforms.

B. DIGITAL TRANSACTIONS, INDUSTRIES AND PRODUCTS

- 22.5 An analysis of digital transactions is a key part of understanding the current state and evolution of digitalization, as digital transactions enable many of the activities and products associated with the digital transformation. Digital transactions include both digitally ordered and digitally delivered transactions and can encompass both goods and services. Digitally ordered transactions are transactions ordered over a computer network by methods specifically designed for receiving or placing orders. Digitally delivered transactions are transactions that are delivered remotely over computer networks.
- 22.6 E-commerce transactions are characterized by digital ordering. An e-commerce transaction is the sale or purchase of a good or service conducted over a computer network by methods specifically designed for the purpose of receiving or placing orders. E-commerce transactions can be ordered from a retail or wholesale trader, directly ordered from the producer or supplier of the good or service, or ordered via a digital intermediation platform (DIP). E-commerce margin services are supplied by retail and wholesale traders that receive orders digitally.
- 22.7 Digital industries include the producers of the goods and services that enable digitalization. For example, digital transactions are made possible by digital networks and complementary ICT products. Digital industries also include the industries enabled by digital networks. One such industry consists of e-tailers, which are retail and wholesale traders that receive most orders digitally. Other digital industries discussed below are DIPs, platforms based on data collection and advertising, and financial service providers that predominantly operate digitally. In addition, the analysis of digital industries discussed as part of the digital SUTs includes a row for producers dependent on DIPs and a row for other producers operating only digitally.

Digital Products

- 22.8 This section defines the digital products that could be included in an analysis of the supply and use of digital products or of international trade in digital products. Some products that have emerged as part of digitalization raise measurement questions. This section also includes subsections on the measurement of some specific digital products.
- 22.9 Digital products either enable digitalization or are enabled by digital technology and infrastructure. The products enabling digitalization include ICT goods (both ICT equipment and

components), software, data and databases, and telecommunication and network communication services. The products enabled by digitalization include services delivered over a computer network, such as cloud computing (which is also an enabler of many digital services), digital intermediation and other services of online platforms, audio and video streaming, online conferences, online learning, and digital financial and payment services.

- 22.10 Digital products can be divided into ICT goods and digital services, with digital knowledge-capturing products such as computer programs, data and databases included in digital services unless sold on physical media such as a disk. The ICT goods are the goods included in the ICT products of the alternative structure for products of the information economy in the Central Product Classification (CPC) version 2.1. Digital services include the ICT products that are services – ICT services, digitally delivered content and media products such as online video games, and services of validating transactions in digital assets. Knowledge-capturing products are grouped with services even though they have some of the characteristics of a good.
- 22.11 Digitalization has resulted in, and been accelerated by, the emergence of cloud computing as a new way of accessing ICT resources. It has also resulted in new types of assets. The conceptual and measurement issues raised by cloud computing, data assets, artificial intelligence (AI) systems, and nonfungible tokens as a type of digital asset are discussed in this subsection. Online platforms are discussed in subsection D and digital financial services and fungible digital assets are discussed in subsection E.

1. CLOUD COMPUTING

- 22.12 Cloud computing technology has enabled a shift in the location where most computing occurs from the user's premises to remotely located data centers accessed over a network, sometimes referred to as "the cloud." Furthermore, the growing use of cloud computing services has caused large scale substitution of purchased ICT services for ownership of computing and communication equipment and software assets. Cloud computing services are used in the production or delivery of many of the digital services delivered over the internet. Cloud computing services are primarily used as an input into the production of other goods and services (i.e., for intermediate consumption).
- 22.13 Cloud computing services consist of computing, data storage, software, and related ICT services accessed remotely over a network, supplied on demand and with measured resource usage. Measured resource usage allows pay-per-use charging based on actual resources consumed, although charges are sometimes based on predetermined limits on the IT resources accessed (e.g., data storage). Measured resource usage also helps allocate resources efficiently because cloud computing technology takes advantage of resource pooling. Another characteristic of cloud computing technology is rapid elasticity, which means that users with fluctuating or fast-changing computing needs can scale their consumption up or down as circumstances warrant.
- 22.14 The main cloud computing products can be divided into three broad categories: i) infrastructure-as-a-service (IaaS), which gives the user on-demand access to hardware such as a virtual server; ii) platform-as-a-service (PaaS), which also includes access to a software platform; and iii) software-as-a-service (SaaS), which includes access to the application software. Users of IaaS or PaaS provide their own software license, or software original. Function-as-a-service (FaaS) is a simplified type of PaaS that allows application functionalities to be executed in response to events. In addition, business-process-as-a-service (BPaaS) enables organizations to automate business processes using cloud computing software and platforms (i.e., SaaS and PaaS).
- 22.15 Cloud computing is part of a broader shift to remote computing that also includes the growth of colocation and hosting services. Remote datacenters can offer advantages such as physical infrastructure that supports large-scale computing, high network bandwidth and optimized connectivity, low cost, and security. To benefit from such advantages, IT users may lease space for their equipment in a colocation datacenter, or they may lease servers and other ICT

- equipment from a supplier of managed or unmanaged hosting services. IT users often consume a combination of the three types of remote computing services – for example, their colocated or hosted equipment may connect with a supplier of cloud computing services.
- 22.16 Cloud computing users with a long-term contract for dedicated access to a server in a cloud computing datacenter are considered to be economic owners of the server if the operating risk is borne by the user, making the contract a financial lease. Also, rather than paying per-use licensing fees to access a software product supplied by the cloud computing enterprise, cloud computing users may hold long-term license for a software product that they access in the cloud. If the term of the software license is more than a year, the license conceptually represents a software asset of the user, and one-year software licenses that automatically renew are also treated on the same lines, for practical reasons. Software subscriptions from software publishers that come with a long-term license are software assets, not intermediate consumption of software services (which is the case with licenses of less than one year). This follows the treatment of software licenses outlined in paragraph 10.100, 2008 SNA (and its update in 2025 SNA chapter 11).
- 22.17 The fixed capital formation of cloud computing enterprises may include own-account production of software and equipment or equipment designs. For example, a large cloud computing enterprise may design equipment that meets its needs and outsource the physical production to a contract manufacturer. This enterprise's production of original equipment designs is measured by its cost and may be categorized as either own-account investment in equipment or own-account R&D capital formation.
- 22.18 Data center construction is also part of the fixed capital formation associated with cloud computing. Real estate enterprises that specialize in the construction and operation of data center buildings often lease data center buildings to cloud computing enterprises. If the cloud computing enterprise bears the operating risks, the lease should be treated as a financial lease. The shift from purchasing software and hardware as ICT fixed assets to consuming cloud computing services presents challenges for the analysis of the contribution of ICT fixed capital formation to economic growth and total factor productivity (TFP) growth. To provide the detailed data on consumption of cloud computing and hosting services needed to understand the changes in how ICT resources are accessed and the general role of ICT in production may require adding product detail on cloud computing and related services to existing classifications. This could be done as part of the digital supply and use table (SUT) or the digital economy thematic account discussed in Section F.
- 22.19 Cloud computing and other remote computing services are often supplied across borders, and important suppliers of these services are multinational enterprises with domestic and foreign computing establishments connected by cross-border networks. The consumption of these services takes place in the location of the production process into which they are an input. For example, if a business in country A purchases computing services from a cloud computing establishment in country B, the computing services will be an export of country B and an import of country A. In balance of payments, these services are recorded as part of the standard component computer and information services (refer to Chapter 11, Services Account, BPM7 for further details). The resource pooling aspect of cloud computing technology, which means that workloads can shift between servers or even establishments, can make it hard to know where the physical production of a computing service occurred. However, the flows of spending on cloud computing should be more feasible to track. Also, ensuring that the estimates of exports and imports of cloud computing services are consistent with the value of net exports implied by the difference between the economy's production and consumption of cloud computing services may improve their accuracy. For an economy that is just an importer of cloud computing services (and not a producer of these services), this implies that the data on intermediate consumption of these services in the economy (assuming that the services are consumed by businesses) could furnish a reliable estimate of imports
- 22.20 Hosting and colocation services are exported when foreign-owned IT assets, such as servers

and software, are hosted in a domestic data center. Similarly, these services are imported when locally owned ICT assets are hosted in a foreign data center. The investment in the ICT assets should be recorded in the economy of their owner.

2. DATA ASSETS

- 22.21 The emergence of data as an important type of intellectual property product is among the ways in which digitalization has transformed the economy. In the digitalized economy, many enterprises owe much of their value to their holdings and uses of data, and many products and production processes depend on data. These enterprises' data assets enable them to match suppliers, products, or information to buyers' needs. In particular, e-tailers and online platforms use data to produce matching services, either of customers with the product that suits their needs, of users with each other, of producers with consumers, of advertisers with viewers, or of funders with borrowers. Moreover, producers of all types, including governments, use data for purposes such as developing and implementing product or program improvements, improving operational efficiency and customer experiences, planning, and marketing..
- 22.22 Data as an asset is defined as information content that is produced by accessing and observing phenomena, and recording, organizing, and storing information elements from these phenomena in a digital format and that provides an economic benefit when used in productive activities. Digitized information that does not provide a direct economic benefit to its owner, including ancillary data generated as a by-product of the producer's operations, is excluded.
- 22.23 Data is produced when information on observable phenomena (OP) such as facts, behaviors, and characteristics is recorded, organized, and stored in digital format. In the next step in the data-information value chain, database assets are created by structuring and formatting the data to enable efficient retrieval and analysis. Databases consist of files of data organized in such a way as to permit resource-effective access and analysis. They do not include the data or the database management system (DBMS) software. The cost of producing databases includes planning and implementing the structure and design of the database and preparing the data to facilitate its analysis.
- 22.24 In the last step of the data-information value chain, the owner of the data derives economic benefits from data by extracting insights and knowledge via the analysis of the data. (The owner of the data could also derive economic benefits by selling the data, in which case different steps of the data-information value chain will be performed by different data owners.) The types of intellectual property products created by producing and analyzing data include software, research and development, and mineral exploration. The cost of acquiring data used only once to develop an intellectual property product may be included in the value of the intellectual property product.
- 22.25 Despite their conceptual difference, data and databases are difficult to measure separately because they are produced with similar inputs and because transactions prices generally reflect the combined value of the database and the data. For reporting purposes, data and databases are therefore combined into a single detailed intellectual property (IP) product called *data and databases*. This detailed product is then combined with *software including artificial intelligence* to form a higher-level class of IP product. (Refer to Table 11.4, Treatment of Intellectual Property, in *BPM7*, for details on the recording of data and databases in balance of payments and to the discussion of intellectual property products in SNA2025 chapter 11 for general guidelines.)
- 22.26 Most data assets are produced internally. The value of own-account data assets is measured by their cost of production. This cost includes the expenses to develop a data production strategy, to collect and record the information elements of interest, and to gain access to information on the OP.
- 22.27 Data assets can also be acquired in purchase transactions. Purchasing data may represent either fixed capital formation or intermediate consumption of data services depending on the

- duration of the use of the data in production and the limitations on the purchaser's use of the data. The sale of the data original, which would include rights to sell copies of the data or licenses to use the data and all other ownership rights, transfers ownership of the data asset to the purchaser. Copies of long-lived data with general rights to use the data in production for more than a year are also classifiable as fixed assets of the purchaser. However, the right to use a purchased copy of the data for less than a year is a service analogous to an operating lease. The sale of information derived from data, which must be distinguished from a sale of the data, is a service. Cross-border transactions in data assets are recorded in the services account (refer to BPM7 chapter 11 Services Account for further details).
- 22.28 Digital platforms usually collect data on their users. If the subjects of the data collection receive payments for access to the collection of data on their OP, those payments are part of cost of producing the data asset. However, payments for authorization to collect data on users' OP are classified as distributions of income rather than as services and hence included in rents. Agreeing to collection of one's data (such as when visiting a free online platform after accepting the license agreement) does not fall within the definition of production and is therefore not a service. (Platform users who receive payments for undertaking specific actions to assist the collection and recording of data on their OP do supply a service, but such cases are likely to be too rare in practice to be worth distinguishing.)
- 22.29 Payments for access to data collection on an individual's OP are classified with rents because being the subject of the data collection is not to be considered equivalent to supplying a service. However, this treatment should not be taken to imply that permission to collect a subject's data confers access to a non-produced, nonfinancial asset, as specified in the definition of a rent in paragraph 8.17.
- 22.30 The SNA asset boundary for fixed assets includes produced assets used in production for more than a year, so data that will be used in production for more than a year is conceptually a fixed asset. However, many types of data (including behavioral data used for targeted advertising) tend to have a relatively short service life. The value of the goods and services produced with inputs of shorter-lived data conceptually includes the value of that data. When feasible, the cost of production of data whose service life is clearly short (e.g., data that is stored for only a short time) should be treated as intermediate consumption rather than fixed capital formation.
- 22.31 An enterprise's own-account production of data may include both data with a service life shorter than a year and data with a service life longer than a year. In these cases, the information needed to separately identify the costs of producing the short-lived data and the costs of producing the long-lived data is often unavailable. When the separate cost of producing the short-lived data is unknown, a relatively short average service life that reflects the inclusion of the data with a service life shorter than a year may be used to estimate the value of the combined stock of data assets. Although including expenses that do not create economic benefits in future years in the estimate of fixed capital formation has the disadvantage of causing producers' gross value added to be overstated, this disadvantage is outweighed by the advantage of capturing the potentially important value of the stocks of data whose useful economic life is a year or less as part of the measure of the stocks of the data assets. Service lives for data of under a year are common, so if the measure of the production of data does not exclude all the data with a service life of a year or less, a relatively short assumption for the service life of data assets is likely to be appropriate.
- 22.32 Expenditures to update or add to an existing own-account data asset are also capitalized. Suppliers of software and connected equipment with embedded software or AI systems often collect data on users to update or add to their data assets. Expenses to collect users' data for these purposes are part of investment in data assets.
3. ARTIFICIAL INTELLIGENCE (AI)
- 22.33 22.35 Artificial intelligence refers to capabilities of a computer program, or system controlled by a computer program, of recognition, reasoning, communication, and prediction that emulate

human recognition, reasoning, and communication. Machine learning, in which data enables an AI software program to learn to predict or classify from experience, is often used to develop or improve AI programs, and AI systems rely on a combination of software and data to generate their output. Furthermore, deep learning (a type of machine learning) enables some AI programs to improve from experience while being used in production. Although they perform tasks that normally require human intelligence, AI programs often use data beyond a scale that humans could analyze.

- 22.34 Many of the innovative products and product capabilities associated with digitalization are made possible by AI technologies. Among these are text mining, computer vision/image recognition, speech recognition, natural language processing, personalized recommendations, and content creation with the help of generative AI. Applications of AI include translation, predictive modeling, risk assessment by lenders and insurers, data analytics, writing summaries of the content of large textual data sets, smart robots, autonomous drones and vehicles, face recognition, fraud detection, and cybersecurity. AI has greatly expanded the types of jobs or job elements potentially subject to automation.
- 22.35 The transformative impact of AI calls for the provision of granular data on AI intellectual property assets to permit analysis of questions about the use of AI and the effect of AI on labor markets and production. To support the provision of this data, AI systems should be distinguished as a special type of software within a class of intellectual property product identified as “Computer Software, including Artificial Intelligence Systems,” with the separate reporting of AI encouraged as an “of which” item. AI is also distinguished as a type of intellectual property product in the definition of this product group. AI is classified as a special type of software even though AI systems frequently include data and hardware elements, because the system is controlled by software even when these elements are present. However, the equipment that contains an embedded AI system (or other embedded software) is still classified as equipment.
- 22.36 The general compilation guidelines for software, data and databases in chapter 11 of the 2025 SNA/chapter 11 of BPM7 also apply to AI software, but AI uses data and machine learning in ways that present some special issues. Data plays a critical role in training AI software, and data is often acquired and organized in a database for the specific purpose of training an AI software program. In addition, AI programs often use data to generate their output. The value of the data used to train an AI software product or to help AI software to generate its output should be recorded separately from the value of AI software, as the data could have multiple uses. However, data assembled in a database solely as a step in the production of an AI computer program and that cannot be re-used may be included in the costs of producing AI programs, if the sum of costs method is used to value the relevant assets.
- 22.37 The performance of an AI software program with learning capabilities may improve as the program is used. Fixed capital formation is not recorded in connection with learning from experience by AI software for pragmatic reasons, as the associated cost is likely to be small. However, the depreciation rate of the AI software fixed asset may be adjusted. Learning from experience can costlessly extend the service life of an AI program, making it appropriate to assume a long life for the asset. (Learning from experience by AI software is not the only source improvements in the performance of software that is already being used: many software products receive automatic updates delivered over the internet.)

4. NONFUNGIBLE TOKENS (NFTS)

- 22.38 Nonfungible tokens (NFTs) are digital records hosted on a blockchain that are associated with a digital or physical asset or product but that are distinct from that asset or product. NFTs certify rights to use and benefit from the asset and may also serve to certify the asset’s authenticity. They are nonfungible because the associated asset is unique and not interchangeable with other assets in the same class the way that the units of a fungible crypto assets are. Payments for NFTs usually must be made in the fungible crypto asset native to the blockchain on which the NFT is hosted (see paragraph 22.85 for the description of fungible crypto assets).
- 22.39 NFTs are classified into three classes: (1) those that convey no ownership rights and only allow

- for personal use of a specified asset or product; (2) those that convey limited ownership rights, beyond personal use for a specified asset or product; and (3) those that convey full ownership rights for a specified asset or product. The main classification of NFTs is based on the type of rights conveyed rather than on the characteristics of the associated asset or good. The purchase of an NFT could, based on these rights, be classified as consumption, as an acquisition of a non-produced asset, or as neither (assuming that the purchase of the associated asset has already been recorded). However, NFTs vary widely both in the ownership rights they convey and in the type of digital and physical asset or good to which they are linked.
- 22.40 NFTs that convey no ownership rights and only allow for personal use of a specified asset or commodity (e.g., the right to display a video clip of a scoring play in a sporting event or of a piece of digital art for non-commercial purposes) are in the first category. The purchase of an NFT that only gives rights to personal use of an item is treated as consumption. This type of NFT is not an investment item because it cannot be used in production and generally does not serve as a store of value. However, in rare cases, an NFT in this category that commands a high price when first auctioned and that has enough exclusivity and appeal to have a lasting value may qualify as a valuable. Treating the initial purchase of NFTs in this class as a consumption expenditure implies that their creation represents production. In the case of cross-border transactions in this type of NFT, such services are recorded under relevant category depending on the content of the related asset.
- 22.41 The second type of NFT conveys limited ownership rights to a specified asset or commodity that go beyond personal use to include use for commercial purposes. NFTs that convey limited ownership rights are in the SNA/BPM asset class containing contracts, leases and licenses if they confer valuable benefits that the holder can realize in practice. Assets in this class are non-produced, nonfinancial assets. The ownership rights conveyed to the NFT holder may affect the value of the encumbered asset. Further information on contracts, leases and licenses is provided in SNA chapter 27/BPM chapter 14.
- 22.42 The third type of NFT conveys full ownership rights. NFTs that convey full ownership are a method of recording and verifying ownership of an underlying asset. The underlying asset should already be recorded in the national accounts. An NFT that conveys full ownership is a digital recording of ownership similar to a property title, not a separate asset. Purchasing an NFT in this category is therefore a way of purchasing the underlying asset. In the case of cross-border transactions in this type of NFT, if the underlying asset is digital or physical, it is treated based on the existing principles for recording such assets.

C. DIGITAL PLATFORMS

- 22.43 Platforms help users to connect with and interact with other users. Platforms are therefore subject to network effects. (Network effects occur when the value of a platform or product to each user increases as the number of users of the platform or product rises.) The opportunities for beneficial interactions with other platform users increase with the number of users in general or the number of users on the other side of the platform, so adding users makes the platform's services more valuable. For example, increasing the number of sellers on a platform makes it more attractive to buyers and increasing the number of buyers makes it more attractive to sellers; similarly, increasing the audience size raises the prices that advertisers are willing to pay.
- 22.44 Digital platforms – also known as online platforms – supply a digital service that facilitates interactions between two or more distinct but interdependent sets of users, who interact through the service via the internet. Digital (or online) platforms differ from suppliers of e-commerce margin services (or e-tailers) because they do not take possession of the goods sold on the platform. They also differ from other producers operating digitally because they intermediate, rather than produce, the goods and services sold on the platform. However, online platforms and e-tailers both use data to produce matching services, either of customers with the product

that suits their needs, of producers with consumers, of advertisers with viewers, or of funders with borrowers. To take advantage of the synergies in technology, an enterprise might combine selling its own merchandise via digital ordering (i.e., e-tailing) and operating a digital platform that facilitate selling by others..

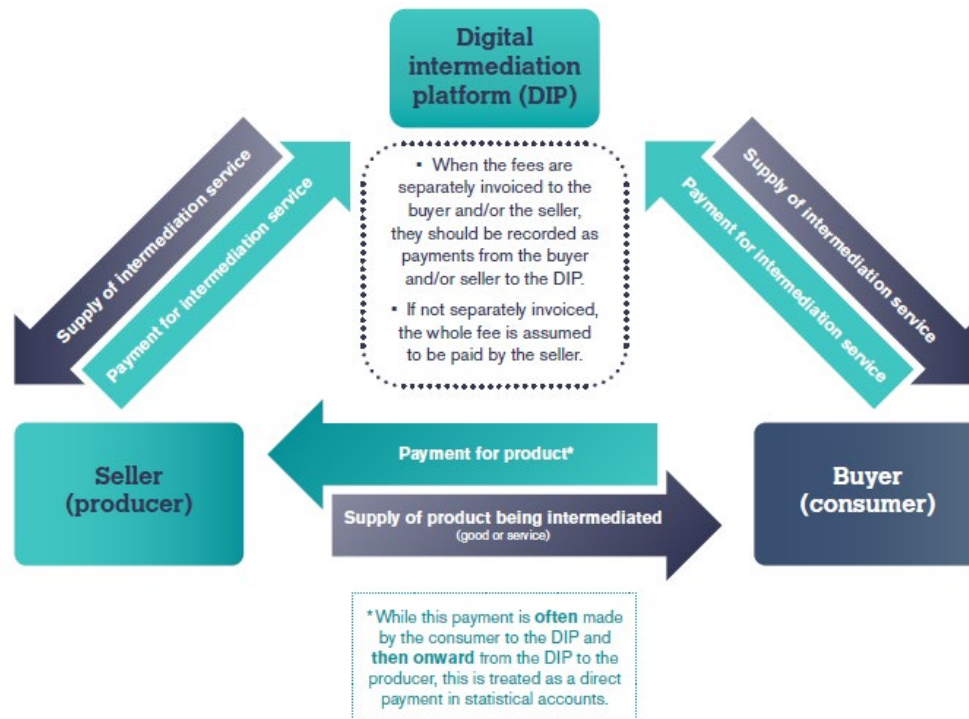
- 22.45 Digital intermediation services facilitate transactions between multiple buyers and multiple sellers in exchange for a fee, without the unit providing the intermediation services taking economic ownership of the goods or rendering the service being intermediated. These services match producers and consumers with each other and facilitate their transactions.
- 22.46 Some digital platforms are free, while other fee-based platforms facilitate financial transactions or interactions that do not involve a transaction. There are therefore four types of digital platforms:
- a. *Nonfinancial digital intermediation platforms* (DIPs) facilitate transactions between multiple buyers and multiple sellers for the ordering and delivery of goods and services for a fee or commission without taking ownership of the goods, or rendering the services, that are being sold (intermediated).
 - b. *Free online platforms* facilitate non-commercial interactions between users or provide entertainment and information services and are usually funded by advertising and the collection of data on their users.
 - c. *Financial digital platforms* intermediate funding or payment transactions for a fee. Financial digital platforms are discussed in section D on digitalization and the financial system.
 - d. *Other fee-based digital platforms* facilitate interactions between users other than transactions in goods and services or financial transactions. Online dating and matrimonial platforms are examples.

1. NONFINANCIAL DIGITAL INTERMEDIATION PLATFORMS (DIPS)

- 22.47 In addition to helping buyers and sellers of goods and services to find each other, nonfinancial DIPs facilitate ordering, payment for, and delivery of, goods and services supplied by institutional units on the seller side of the platform to institutional units on the buyer side of the platform. DIPs charge fees for these digital intermediation services. To increase parties' willingness to transact, they may also provide quality assurance through steps such as vetting the parties that have access to the platform.
- 22.48 The output of a DIP consists of digital intermediation services, which are recompensed through a fee. It does not include the goods and services that the DIP helps others to sell. The possible consumption of the platform's services by the users on the two sides of the platform is shown on the sides of the triangle in Figure 22.1, The seller/producer and the buyer/consumer both consume intermediation services in the case where they are separately invoiced for the services supplied by the platform. In the case where all fees for the platform's services are invoiced to the seller/producer, only the seller/producer is recorded as consuming the intermediation services, and similarly, only the buyer is recorded as consuming the intermediation services in the case where all fees for the platform's services are invoiced to the buyer. However, in all cases, the buyer using the DIP consumes the good or services supplied by the seller/producer using DIP, as shown at the base of the triangle.
- 22.49 Nonfinancial DIPs often accept buyers' payments for the goods and services produced or sold by platform users and deduct their intermediation service fee from the amount passed through to the producer/seller. To capture the economic substance of the transactions in which the platform passes on the payment for the good or service after deducting its fee or commission, these payment flows must be rerouted to include a sale of good or service by the producer/seller using the platform to the buyer using the platform and a purchase by the producer/seller of the intermediation services supplied by the platform. The approach to

recording the transactions of a DIP in which the producer of the intermediated good or service consumes the platform's intermediation services is known as the producer approach. The transactions recorded after any necessary rerouting to implement the producer approach are those shown on the left side and at the base of Figure 22.1.

Figure 22.1. The Possible Types of Transactions of a Digital Intermediation Platform



Source: *Handbook on Measuring Digital Trade*, 2nd edition..

- 22.50 Handling the case when the platform's fee is implicitly included in the price of the intermediated product by recording transactions in which the buyer purchases the product directly from its producer or seller and the producer/seller purchases intermediation services from the platform has some important advantages. This approach allows the supplying of the goods and services sold on DIPs to be recorded in the appropriate industry and the consumption of those goods and services to be recorded in the appropriate class of commodities. It also accounts for the effect of the intermediate consumption of the services of the DIP on the producer's value added. (A complete portrayal of the services of DIPs and the value of the products ordered through DIPs may be provided in a thematic account on the digital economy or a digital supply and use table.)
- 22.51 The buyer is recorded as purchasing intermediation services from the DIP in cases when the DIP separately invoices the buyer for its services. However, in these cases the buyer's payment for the good or services must still be rerouted to record a purchase of the good or service from its producer/seller, and, if a fee is deducted from the amount passed through to the producer/seller, a purchase of intermediation services by the producer/seller. In addition, some DIPs seek to attract buyers to the platform by using a portion of the fees received from sellers to pay rebates to buyers. The rebates represent a reduction in the price of the goods and

services supplied by the seller and are also not part of the fee (or price) that the platform retains for its intermediation services. The price received by the seller must therefore be measured by the net price after the rebate, and the fee recorded as received by the platform for its services must exclude the amount that funds the rebates. The rebate payment must therefore re-routed to show that it is paid by the platform to the seller and then paid by the seller to the buyer, with each rebate representing a reduction in the price received by its payer.

- 22.52 Digital intermediation services are frequently supplied across international borders by non-resident platforms. Goods and services supplied by resident producers to resident buyers via transactions intermediated by a non-resident platform should be recorded as produced and consumed in the compiling economy. Further, the fee or commission received by the DIP should be recorded as an import of digital intermediation services of the compiling economy. Therefore, if the non-resident platform deducts its fee from the buyer's payment for the good or service, the buyer's payment must be rerouted so that the producer/seller is recorded as selling the good or service to the buyer and importing the digital intermediation service. (Refer to BPM7 Chapter 11 the Services Account, for details on the specific recording in balance of payments.) Similarly, in the case of a resident DIP collecting a cross-border payment on behalf of a non-resident producer/seller providing a good or service to a non-resident buyer and deducting its fee from that payment, the buyer's payment is rerouted to go to the producer/seller and an export of the services of the DIP to the economy of the seller/producer is recorded.
- 22.53 Digital intermediation platforms can also facilitate exports by resident suppliers of goods or services, or imports from foreign suppliers of goods or services. Digital intermediation services used by an exporter should be included in the value of the exported good or service. For example, if a DIP located in country A facilitates the supply of a service by a resident of country B to a resident of country C, the price paid by the buyer in country C is the value of service exported by country B and imported by country C. The fee or commission charged by the platform is then the value of digital intermediation services exported from country A and imported by country B. Domestically produced digital intermediation services used by the producer of an imported good or service should conceptually be treated as an export of services and the value of the imported good or service should be measured by price paid by its buyer. However, this treatment may require rerouting the fee or commission paid to the DIP to pass through the foreign producer. If the source data to compile these rerouted flows are unavailable, assumptions (or international cooperation) may be needed to impute the rerouted flows.
- 22.54 Services sold for a fee or commission are usually straightforward to measure, but measuring the intermediation services of DIPs and the goods and services transactions that they intermediate can present compilation challenges. Rerouting the payments collected and fees retained by a DIP may require data that are unavailable, making assumptions necessary.
- 22.55 Furthermore, by allowing producers to interact with previously unreachable consumers, including those in other geographical locations, DIPs have provided selling opportunities to producers previously excluded from the market. Selling opportunities created by DIPs have led to growing activity by informal household enterprises, which are likely to be missing from business registers and other standard sources of statistical information. They have also contributed to the rapid growth of small international transactions in goods and services that may be below de minimis thresholds for customs duties and documentation requirements. Another common compilation challenge from DIPs providing cross-border intermediation services is that source data on DIPs with no local presence and on the activity that they intermediate is not easily available.

5. FREE ONLINE PLATFORMS AND FREE DIGITAL PRODUCTS

- 22.56 Digitalization has been marked by a broad-based expansion in the availability of free products, in many cases provided by online platforms. The SNA framework that values the free outputs of nonmarket producers such as nonprofit institutions funded by donations by the cost of production does not apply to most of these free digital products because they are supplied by

a commercial enterprise. The outputs of commercial enterprises are valued by their price, which is zero in the case of a free product. The emergence of free online platforms and products as part of digitalization has therefore raised questions about whether the output of the digital economy is fully included in GDP.

- 22.57 Free products supplied by market producers are included in GDP as part of the price of other products they help sell or with which they are bundled either directly or indirectly. Taken together, the items in the bundle generate at least enough revenue to cover the operating costs of the supplier of the free product, so the overall output of the supplier of the free digital product is not undermeasured. Free products are supplied by both platform firms and non-platform firms.

Free products supplied by non-platform firms

- 22.58 In the non-platform case, the free output and the priced output are marketed to the same set of customers, and the function of the free output is to promote sales of the priced output to those customers. Suppliers of digital products frequently adopt a “freemium” pricing strategy, in which a free basic version of the product promotes sales of upgrades or a premium version of the product. In these cases, the price of the promoted output includes a mark-up that covers the cost of supplying the free output that has facilitated its sale.
- 22.59 Rather than being free, the promotional output may have a low price that is subsidized by the fully priced product. For example, a low-priced basic version of a software product may require the purchase of an upgrade or a complementary software product to unlock desirable features or capabilities, .
- 22.60 Although a zero or artificially low price of an output that is cross subsidized by the price of another output of that same producer does not cause undermeasurement of the producer’s total output, it does affect the measurement of the composition of the producer’s output. The relative values ascribed to the items in the bundle can matter for the measurement of fixed capital formation if a free or cross-subsidized item used for fixed capital formation is bundled with items used for intermediate consumption, such as the supplies needed to operate a piece of equipment, or the training, maintenance and helpdesk services needed to use a free software product. Also, the relative values assigned to the various parts of the bundle could affect the measurement of exports, imports, or trade patterns if a multinational enterprise sources parts of the bundle from different countries. Finally, the effect of these relative values on the weights of the price and volume indexes could matter for measurement of the volume growth of GDP if the prices of the items in the bundle behave differently.

Free online platforms

- 22.61 Most free online platforms are organized as commercial enterprises. Two-sided (or multi-sided) commercial platforms often charge a price for their services to the users on one side of the platform and supply free services to the users on the other side of the platform to attract and retain those users. The platform users attracted by free services increase the value of the platform’s services to the users on the priced side of the platform. The users who fund the platform by purchasing priced services recoup this expense as part of the transactions with the users on the free side of the platform enabled by the platform’s services.
- 22.62 Free online platforms offer services such as social media, search, and access to content providing entertainment and information. Commercial free online platforms are generally funded by advertising and the collection of data on their users, while offline free radio and television broadcasters are funded just by advertising. The data is used as input in the platforms’ production of advertising services. However, the data, or information derived from the data, may also be sold or used for own-account production of software and R&D.
- 22.63 Platforms funded by advertising services frequently assemble the audience that the advertisers

want to reach by supplying free services. They then include the cost of supplying the free services needed to assemble the audience in the price charged to advertisers. The advertisers, in turn, include the cost of the platform's advertising services in the price of the product sold with the help of the advertising. Both the platform and the firms that advertise on the platform receive at least enough income from the prices at which their output is sold to cover their operating costs. The standard method of measuring the value of a market producer's output by the producer's sales is therefore applicable to both the platform and the funder side users of the platform. Furthermore, households' expenditures on the products advertised on the platform include the cost of the platform's services embedded in the price of the advertised products.

- 22.64 Digital platforms collect and store data on users to produce data assets as a type of own-account investment, and they may also license others to use the data or even sell the data. The value of own-account investment in data assets is usually measured by the cost of production. However, the platforms may also compile short-lived data on recent browsing behavior that is used as an intermediate input for targeted advertising. The value of this short-lived data is part of the price of the advertisement targeting services. More generally, short-lived user data collected by digital platforms can be assumed to be used for intermediate consumption, with its value embedded in the price of the products it helps produce.
- 22.65 A few free online platforms (such as public wikis created and maintained by communities of volunteers) are owned by a nonprofit institution serving households and operate as non-market producers, meaning that their output is not sold for an economically significant price. The output of non-market producers is valued by the cost of production. Nevertheless, the production costs of nonprofit free platforms may be modest in comparison with physical indicators of its output such as number of visits or scale of content it hosts because volunteers may do much of the work. The work of volunteers is outside the production boundary of the SNA but could be included in an extended account on unpaid household service work.

Content created by platform users

- 22.66 Many users of free platforms create content such as videos, images, text, and audio, both as a leisure activity and for commercial purposes such as receiving advertising revenue. Creating content for leisure purposes is outside the SNA production boundary. If the content creator does not receive remuneration, the content is assumed to be created for leisure purposes. Households that receive monetary remuneration from an advertiser or platform for use of their uploaded content may be considered unincorporated household enterprises supplying services to the advertiser or platform. In the case of a platform that takes its fees for services out of the payments from advertisers that are passed through to the content creators, the content creators should be treated as the purchasers of the platform's services and the producers of the services used by the advertisers. If the purchaser is a non-resident, the service should be included in exports of services.
- 22.67 Depending on the context, user-generated content can refer either to content created by the users of a brand's products (customers and brand advocates), or to content created by the users of an online platform. The economic benefits that free platforms receive from platform user-generated content include attracting users to the platform, selling advertising, and adding to the platform's stock of data assets. These economic benefits are a positive externality of the sort that frequently arises from producers' interactions with their customers and are not a basis for inferring that the creator of the unpaid user-generated content has produced a service used by the platform. However, the cost of supplying free services to the platform users who create content may be included in the platform's own-account investment in data assets. Furthermore, an extended account with an alternative approach to measurement of households' consumption of the services of free platforms can optionally treat user-generated content as a service produced with inputs of the platform's free services and used by the platform as an input in its own-account production of data assets.

- 22.68 In addition to posting content on free platforms that receive advertising revenue, content creators may publish on digital platforms that collect subscription fees on their behalf in return for a share of the fees. Although most of this content is likely to have a short economic life, content created for commercial purposes that yields economic benefits for the content creator over more than a year is an intellectual property asset of the creator classified as long-lived entertainment, literary and artistic originals.

Free Software

- 22.69 Software products are often free to download, although the services of the platform hosting the software code may not be free. The free software may be used by households for final consumption, or it may be used in production. Copies of free software are frequently supplied across borders. In addition, free code shared by software developers on code hosting platforms that facilitate collaboration plays an important role in software development.
- 22.70 App stores are a type of DIP on which some of the software items available for households to download to their phone or other device are often free. Free and subsidized apps used by households may be funded by advertising and collection of data, by purchases of premium versions or other items that they encourage, or by other services whose use they facilitate. Like the services of an online platform funded by advertising, the services of apps funded by advertising are purchased indirectly as part of the price of the advertised product.
- 22.71 Open-source software refers to free software whose source code is publicly available under a license to copy, use, inspect, modify, and share. Open-source software is used in production by corporations, governments, and nonprofit institutions. It is usually developed, maintained, and supplied by a corporation, university, government unit, or nonprofit institution whose investment to develop the open-source software original would be included in a general estimate of own-account software investment based on costs of production, such as the compensation expense for software developers.
- 22.72 A complex open-source software product may contain components developed in multiple economies, as the development of complex software products is often spread across multiple locations. Depending on the circumstances, it may be appropriate to allocate the investment to develop the open-source software product among the economies in which the development work takes place, or it may be appropriate to attribute the entire investment to the economy of residence of the owner of the software asset. In the case of software produced by a multinational enterprise, the headquarters or one of the foreign affiliates may acquire full ownership of the software original by funding the software's development.
- 22.73 Even though open-source software does not generate licensing fee income for its developer, it can qualify as an asset of its developer. The producer of an asset is an economic owner if the producer bears the risks of production in order to claim benefits associated with the use of the asset. Open-source software developed by corporations is usually funded through sales of complementary services, such as training and support, or by other products it helps sell. Open-source and other free software may also help increase the number of users on a platform or enhance the developer's reputation and profile. Open-source software supplied across borders may be funded by cross-border sales of complementary services or other products.
- 22.74 Open-source software is sometimes developed by individuals working independently. Unpaid production of open-source software originals by volunteers is outside the SNA production boundary. However, independent developers of open-source software for commercial purposes are unincorporated household enterprises investing in own-account software.
- 22.75 The value of open-source software copies supplied by enterprises may be embedded in the price of complementary outputs that the open-source software helps sell or that are bundled with the open-source software. These purchased outputs may be software or services used for intermediate consumption. If software users substitute open-source software funded by mark-ups on intermediate consumption items for explicit purchases of software, the standard

procedures will still correctly measure the total output of the supplier of the free software but the breakdown of the uses of that output will omit the use for software investment. Measured software investment will also be reduced if software users substitute open-source software distributed by a government entity or nonprofit institution operating as a non-market producer for purchased software.

Increasing the Visibility of Free Online Platforms and Products

- 22.76 The value of the free services that advertising-and-data-funded digital platforms supply to households is relevant for analytical purposes and for understanding the broader impact on household consumption of the emergence of these free platforms. Alternative measures of household final consumption expenditures and the output of free online platforms that include the households' direct consumption of the services of advertising-and-data-funded digital platforms may be presented in an extended account on free online platforms, as discussed in Section F below.
- 22.77 The effect of free platforms and free digital products on volume growth of household consumption is also conceptually relevant for understanding the impact of digitalization on prices and volumes. Free digital products and the measurement of prices and volumes is discussed in section E.

D. DIGITALIZATION AND THE FINANCIAL SYSTEM

1. NEW FINANCIAL SERVICES AND MEANS OF PAYMENT ENABLED BY DIGITALIZATION

- 22.78 Digitalization has resulted in the appearance of new financial service products and of new digital assets designed to be used as a means of payment. Means of payment refers to the instrument used to make the payment, such as a check, debit, or credit card. The new digital financial service products fall within existing categories of products, and the new digital assets fall within existing asset categories. However, they should be reported as “of which” items (or as part of the product detail in a thematic account on the digital economy and the associated digital supply and use tables) when they are important and can be separately identified. (*BPM7* recommends introducing “of which” categories for i) fintech companies within the subsector classification; and ii) instruments or services classifications where necessary to separate out fintech-related instruments and services.) (see paragraph 5.154 for the definition of fintech).
- 22.79 It will usually be appropriate to provide a breakout of *financial service providers predominantly operating digitally*, which will contain the providers of financial services that primarily transact with consumers via digital channels as part of the digital supply and use tables or thematic account on the digital economy discussed below. *Financial service providers predominantly operating digitally* include financial digital platforms,, digital providers of insurance and reinsurance services (InsurTech), digital banking platforms operating solely online (neobanks) or predominantly online, e-money issuers, and online only foreign exchange bureaus and money transfer operators. Some important digital payment mechanisms are e-money (which includes mobile money), digital assets that are used as a means of payment including fungible crypto assets, and central bank digital currencies (CBDCs).

6. FINANCIAL DIGITAL PLATFORMS

- 22.80 Financial digital platforms provide matching services and facilitate financial transactions between suppliers of funds and users of funds. They do not take ownership of the financial assets arising from claims on the users of funds or incur liabilities to the suppliers of funds. They receive fees or commissions for their services and are classified as financial auxiliaries (S126). They differ from conventional financial intermediaries, which incur liabilities on their own account and acquire financial assets and which charge for their financial intermediation

services implicitly through interest rate margins.

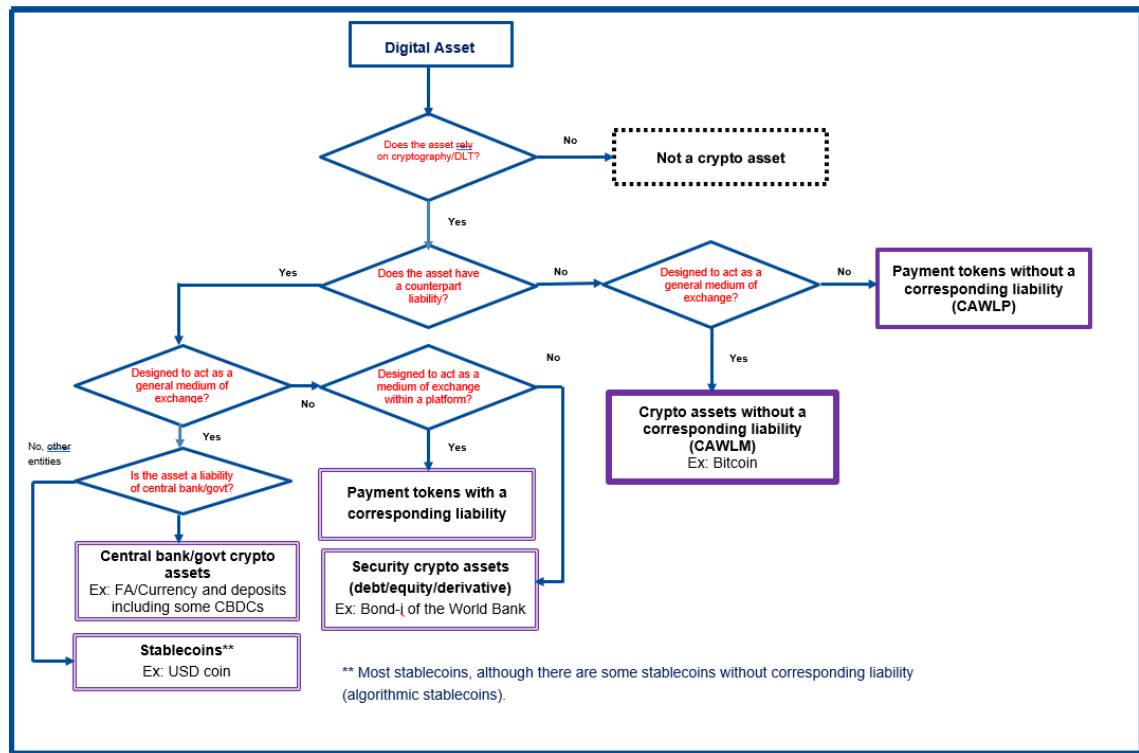
- 22.81 There are four types of financial digital platforms that facilitate access to funding in exchange for a fee or commission: (1) peer-to-peer and other online lending platforms, (2) equity-based crowdfunding platforms, and (3) philanthropic (or donation-based) crowdfunding platforms, and (4) reward-based crowdfunding, in which the donors to a project expect to receive a non-financial reward such as a good or service. Peer-to-peer lending platforms facilitate loans between households or from households to small enterprises. Other lending platforms match households and small enterprises seeking funding to institutional investors seeking lending opportunities. Equity-based crowdfunding platforms facilitate financing transactions in which the funders receive equity stakes in the enterprises or projects they fund. The donation and gift transactions mediated by philanthropic crowdfunding platforms are current transfers or, potentially, capital transfers, and an element of the services these platforms perform is vetting of causes that are seeking assistance. The funds advanced to project owners on reward-based platforms do not qualify as loans, as the project owner's obligation to supply the reward is contingent on the successful completion of the project.
- 22.82 A type of financial digital platform whose main purpose is not to facilitate access to funding consists of crypto asset exchanges and trading platforms. Crypto asset exchanges and trading platforms allow users to buy, sell and stake (lend) crypto assets for a fee or commission. They embed their fees into their buying and selling prices. Some crypto exchanges may provide custodian services and hold crypto assets of customers for a fee. Crypto assets with a corresponding liability (e.g., asset-backed stablecoins, debt, and equity security crypto assets) are classified as financial assets (see paragraph 22.76 for the classification of crypto assets). Since financial assets are generally among the assets traded on crypto asset exchanges and trading platforms, they are classified as financial auxiliaries.

7. DIGITAL REPRESENTATIONS OF VALUE

- 22.83 Digital assets designed to act as a medium of exchange or financial instrument are digital representations of value recorded on a cryptographically secured distributed ledger or using a similar technology or issued by a central bank as a CBDC. Medium of exchange is defined as a means for acquiring nonfinancial assets (goods, merchandise equipment, etc.), services, and financial assets without resorting to barter. Digital assets differ from e-money. E-money is monetary value stored electronically on a physical device such as card or phone or stored remotely, which represents a liability of the e-money issuer and is denominated in a fiat currency. E-money must represent general purchasing power (i.e., it can be used for making payments to a variety of other entities).
- 22.84 Crypto assets are digital representations of value that use cryptography and distributed ledger technology (DLT) such as blockchains to enable parties to transact directly with each other without the need for a trusted intermediary. DLTs allow transactions to be recorded, synchronized, and shared simultaneously on multiple nodes in a decentralized network. Blockchains create cryptographic records of transactions and ownership that are impossible to alter without detection.
- 22.85 Crypto assets are classified as either fungible or nonfungible. Fungible crypto assets are divisible and not unique (e.g., one bitcoin is equal to any other bitcoin and can be divided into equal pieces of similar value). Conversely, nonfungible crypto assets, commonly known as nonfungible tokens or NFTs, are unique and non-divisible (see Section B.4). Fungible crypto assets are classified into three broad categories: (1) those designed to act as a general medium of exchange (which are further divided in those with, and those without, a corresponding liability); (2) those designed to act as a medium of exchange within a platform or network (again divided into those with, and those without, a corresponding liability); and (3) security crypto assets. Security crypto assets are tokens certifying ownership of a financial instrument. They always have a corresponding liability and should be recorded as debt securities, equity securities, or financial derivative depending on the nature of the claim on the issuer.

- 22.86 A digital assets decision tree to aid in identifying fungible crypto assets according to the above typology and other digital assets that have a corresponding liability appears in Figure 22.2. Digital assets with a corresponding liability include CBDCs, security crypto assets, payment tokens with a corresponding liability, and most stablecoins. Payment tokens entitle the holder to future access to a good or service. Stablecoins aim to maintain a stable value relative to a specified asset such as a fiat currency or gold, or a specified basket of assets, usually by being backed (or, at least, advertised as backed) by the assets of the issuer. The stability mechanism might also be an algorithm that causes the supply of the asset to respond automatically to changes in demand for the asset.
- 22.87 All types of crypto assets are within the SNA asset boundary. Crypto assets with a corresponding liability are classified as financial assets. In particular, crypto assets with a corresponding liability designed to act as a general medium of exchange are [separately identified under “currency and deposits” and those designed to act as a medium of exchange within a platform are treated as equity or debt security crypto assets](#). On the other hand, crypto assets without a corresponding liability are classified as non-produced, nonfinancial assets within a separate category. If a crypto asset without a corresponding liability is ever able to gain widespread acceptance as a general medium of exchange, the guidance on its classification may be re-considered. The capital account, financial account, and balance sheet chapters of the SNA (chapters 11, 12, and 14) and the classification of financial assets and liabilities (chapter 5) and the capital account (chapter 14) chapters of the BPM provide additional details.
- 22.88 Validating crypto asset transactions is a service. The process of validating transactions in crypto assets is known as mining in the case of crypto assets without a corresponding liability that rely on proof of work for ensuring the security of transactions. This process includes the release of new units of the crypto asset as an implicit fee paid to the miner validating the transaction. The miner validating the transaction also receives an explicit fee in crypto assets paid by the party initiating the transaction, which is normally the sender/seller. The validation services that are rewarded with newly released units of the crypto asset are assumed to be collectively consumed by the existing holders of units of that crypto asset, while those rewarded by the explicit fee are consumed by the transactor paying the fee (normally the sender/seller). Refer to Chapter 7, *2025 SNA* and Chapter 11, *BPM7* for details on the recording of output of mining and cross-border validation services.

Figure 22.2 Decision Tree for Classifying Fungible Digital Assets



E. MEASURING PRICES AND VOLUMES OF PRODUCTS AFFECTED BY DIGITALIZATION

- 22.89 Many of the measurement challenges arising from digitalization involve prices and volumes rather than the output at current prices. Price and volume measurement challenges are particularly common for products affected by digitalization because price change is straightforward to measure only when the products and their characteristics remain static. Digitalization has transformed household consumption and caused rapid change in products' characteristics and sources of supply. New digital products regularly disrupt existing ones, new models or service contracts frequently embody quality improvements, digital intellectual property products and services with no physical units of measurement are growing in importance, and free products often appear or cease to be free.
- 22.90 Regular and timely refreshment of the samples of models (and outlets) used to calculate the price indexes for products subject to frequent quality improvements to keep them representative of current purchasing patterns is the first step in compiling deflators that capture these products' quality change. Secondly, the appearance of new models and the exit of obsolete models must be handled in a way that allows the price index for the product to reflect the value of the quality changes.
- 22.91 The commonly used "matched models" procedure for handling entry of new models and exit of old ones when constructing the price index for a product considers only the price changes of the continuing models in calculating the change in the index. Models not present in both periods are excluded from the subsample used to calculate the change in the index. Leaving these models out of the index calculation has the advantage of avoiding the risk of counting price differences caused by quality differences as inflation, i.e., as price change caused by the passage of time. However, the method implicitly assumes that the quality-adjusted price of the new model equals the price of the model it is replacing (after adjusting for the general change in price of the product between the last period with the exiting model's price was observed and the first period when new model's price is observed). Newly introduced models of products benefiting from advances in digital technology often offer substantially improved quality at

about the same price as the model they replaced.

- 22.92 To capture the price and volume impact of quality changes in digital products, the prices of new models must be adjusted for the value of their quality difference from the models they replace. Hedonic regression models relating the price to the product's characteristics are a recommended method for adjusting prices for quality change. Hedonic models that use machine learning methods to predict the price of the new model in the previous period and the price of the old model in the current period have been proposed as a technique for doing quality adjustment at scale when analyzing large datasets covering e-commerce transactions.
- 22.93 Another technique used to adjust the price of a digital product for a quality change is options pricing, which averages observations on the differences in the price of the item caused by the presence or absence of a characteristic offered as an option. This is the same sort of adjustment that is implicitly made by a hedonic regression (on hedonic regression, see chapter 18).
- 22.94 A price measurement problem known as outlet substitution bias occurs when buyers obtain a substantially identical product at a lower price from a new source of supply. The lower cost supplier may have appeared as part of digitalization. For example, a ride sharing DIP may offer lower prices without a significant sacrifice in quality compared to the taxis, or a good may sell for less online than offline. The impact on the average price paid of a shift in households' shopping patterns to new source of supply can be captured by compiling a unit value price index (in which the total expenditure is divided by the total quantity purchased.) However, the composition of a unit value index must be homogeneous, as the maintained assumption is that all the items included in its calculation have the same per-unit intrinsic value. (Under the weaker assumption that the average quality of items being purchased is not falling, a unit value index can provide an upper bound measure of inflation in price of the product.)

1. MEASURING QUALITY CHANGE IN ICT GOODS AND GOODS WITH ICT COMPONENTS

- 22.95 Frequent quality changes in ICT equipment and ICT durable goods enabled by rapidly advances in semiconductor chip technology have presented challenges for price index compilers ever since this technology was first commercialized. New models of ICT goods have often offered a substantial improvement in performance at almost the same price as the previous model, yet the widely used "matched models" method for price index compilation implicitly assumes that the quality-adjusted prices of the two models in an overlap period are the same. Furthermore, the spread of quality changes enabled by semiconductors beyond ICT goods to many kinds of equipment and durable goods with ICT components, including motor vehicles, is an important element of digitalization.
- 22.96 Hedonic regression methods or the option price method can be used to estimate the value of quality changes associated with model replacements to enable the price indexes for ICT goods and goods with IT components to capture their quality improvements. In the case of microprocessors, rather than just considering physical characteristics, performance benchmarks or indicators are sometimes included in the hedonic quality adjustment model. If hedonic and options pricing methods are not feasible, information on the cost of production of a new product feature may be used to adjust the product's price index for the quality change. For example, a new capability of a motor vehicle made possible by embedded semiconductors and software might be valued by the producer's cost of adding this feature plus the usual distribution margins included in the retail price.

8. SOFTWARE AND DATA

- 22.97 Software and data assets play critical roles in the success of many digital firms. The growing importance of software has expanded the range of uncertainty around the deflator for

- investment in IT products because the volume and quality of different software packages are hard to assess, and in-house production of software is common. The price or volume growth of own-account software and data must generally be inferred from the prices and volumes of the inputs, either assuming no productivity change or using the rate of productivity change of a related activity. Another option for deflating custom software is to use the price index of a related product, such as standardized software products sold by software publishers. Continuous improvement in the performance of AI software that learns from experience is not included in the volume of software investment.
- 22.98 Data is a heterogeneous type of asset, with wide variation in value depending on the topic, context, and circumstances. The volume and value of gross investment in creating data assets are measured by the volume and value of the inputs used to produce the data assets. This could be smaller than the income that the data is expected to generate. If the data is sold, the price received may imply the need to record a revaluation. Normal obsolescence causes the volume of a data asset to decay.
9. CLOUD COMPUTING
- 22.99 Many of the enterprises that supply cloud computing services offer a great variety of detailed products within the broad categories of IaaS, PaaS, and, especially, SaaS. Thus, the length and complexity of the menu of products is likely to pose a challenge for construction of a price index for cloud computing services. Frequent introductions of new or modified products and improvements to existing products compound the difficulty. However, serviceable deflators for cloud computing services can usually be compiled by selecting representative samples of major products with relatively standardized characteristics from each product category and adjusting for quality changes as necessary.
- 22.100 Cross-border transactions are another common challenge for estimation of deflators for output and consumption of cloud computing services. International collaboration may be required to overcome the problems of price data availability so that deflators for the consumption of cross-border cloud computing can be compiled.
10. INTERNET AND TELECOMMUNICATIONS SERVICES
- 22.101 The volumes of internet and telecommunications services have risen rapidly. Households spend more time online and utilize more data, as e-commerce expands, data processing moves to the cloud, and telecommuting becomes routine. Data transmission speeds have also improved. Commonly used methods for constructing consumer price indexes and producer price indexes for telecommunications services may, however, fail to capture this volume growth. To measure the change in the cost of purchasing a given volume of internet and telecommunications services accurately, samples of contracts, products and carriers must be kept up to date and prices must be adjusted for quality changes such as improvements in data transmission speeds or improvements in the geographic coverage offered by a mobile telecommunications provider.
- 22.102 If the available price indexes for internet and telecommunications services fail to capture the quality improvements that are appropriate to include in the measure of volume growth, an alternative to deflating by a price index is to estimate the volume growth of internet and telecommunications services directly. The volume index is constructed from quantity indicators such as megabytes of data usage. To minimize the risk of distortion from changes in the composition of the aggregate being measured, the quantity indicators should be defined at a detailed level, and the growth rates of the physical indicators for the various detailed products should be aggregated using expenditure or revenue weights.

11. E-COMMERCE AND DIGITAL INTERMEDIATION PLATFORMS

- 22.103 Both business-to-household and business-to-business e-commerce transactions enable producers to access markets they could not otherwise serve, and prices may behave distinctively in the markets accessed through digital channels. The prices used to construct the price index for a type of good or service must therefore adequately represent the e-commerce transactions. Similarly, suppliers that predominantly sell through digital channels, including e-tailers, digital platforms, and sellers/producers dependent on DIPs, must be must adequately represented in the samples of suppliers.
- 22.104 Deflators for household final consumption expenditures on items sold online must give appropriate weight to prices from e-tailers, and other sellers/producers selling online, including those selling through DIPs. Prices from online retailers and sellers on DIPs are often lower than offline prices for similar items. The change in the average price paid by households when households substitute a source of supply with a different price level for their old source of supply for an identical item conceptually represents a decline in the deflator for household final consumption expenditures. In practice, however, practical difficulties and concerns about possible unobserved differences in quality usually keep price index compilers from capturing the possible price decline associated with the switch to online sources of supply.
- 22.105 A common practice in constructing price indexes for a good or service is to treat the price at a single point in time during the month as the price for the entire month. However, online prices tend to change more frequently than once a month. For items with frequent changes in their online price, a monthly unit value will provide a suitable measure of the price during the month if the data on expenditures and unit sales needed to calculate the unit value are available. When available, item-level expenditure data can also furnish detailed weights for a price index or volume index.

12. EXPANDED ACCESS TO VARIETY AND CUSTOMIZATION

- 22.106 Digitalization has given buyers access to vast arrays of products available for purchase and to abundant information on products and sellers and has also increased opportunities for product customization. This expanded access to variety and information has improved buyers' ability to find the specific varieties and suppliers whose characteristics best match their needs or tastes. The upward effects on the level of material wellbeing achievable with a given level of spending from expanding households' access to variety and improving the matching of product characteristics with shoppers' tastes and needs are beyond the scope of the deflator for household final consumption expenditures. However, they are relevant for understanding the effects of digitalization on the growth of material wellbeing.

13. FREE DIGITAL PRODUCTS

- 22.107 Conceptually, the increased availability to households of free products brought about by digitalization represents a decline in the price and an increase in the volume of the household final consumption basket. The effect of appearance of a free product is straightforward to measure in the case where the free product directly replaces a priced product. When an item that households must purchase separately becomes free, the same total expenditure will command a greater volume of goods and services and the effect on the household consumption deflator will be given by the decline in the cost of the bundle. However, when the services of free online platforms start to be bundled in the prices of advertised products, the theoretical decline in the cost of the bundle will depend on the assumed value of the free online platform services. An extended account that values the free services of digital platforms by their cost of production is discussed below in the subsection on "Analytical Tools to Increase the Visibility of Digitalization."

- 22.108 The free digital services and embedded product capabilities in devices such as the smartphone that have appeared since the start of digitalization often enable households to achieve outcomes that previously required purchases of market goods and services. They may also save time or allow their user to do things that they previously could not do. However, the assumptions required to measure the effects on the household final consumption deflator of the appearance of a free digital product that is not a direct replacement for any priced product would often have unacceptable effects on the replicability of the results. Theoretical effects on deflators and volume growth associated with the appearance or disappearance of free digital products that are impossible to measure without hard-to-justify assumptions are beyond the scope of the measures of the national accounts.

F. ANALYTICAL TOOLS TO INCREASE THE VISIBILITY OF DIGITALIZATION

- 22.109 Digitalization is a multidimensional phenomenon that requires multiple indicators and perspectives to understand. Furthermore, the standard national accounts aggregates provide limited information on the transactions, products and activities affected by digitalization. In the standard classification of industries and commodities published in the national accounts, digital products are often subsumed in broader aggregates and scattered across different aggregates. Enhanced visibility into digital firms, products, and transactions is therefore needed for a full understanding of the effects of digitalization on the economy and of the performance and the evolution of a digitalized economy. Distinguishing the digital components of the standard aggregates will also provide reassurance to the users of the national accounts that the output and consumption of digital products is being fully measured as part of those aggregates.
- 22.110 A thematic account on the digital economy, digital supply and use tables (SUTs), and an extended account on free services of online platforms are flexible tools for bringing the impact of digitalization on the economy into focus, where flexibility means that the content that is appropriate to include depends, in part, on which aspects are locally important and practical to measure. These tools complement each other. The conceptual framework of the digital SUTs will help to ensure the accuracy and consistency of the data presented in the digital economy thematic account, while the digital economy thematic account is a tool for communicating the key information contained in the digital SUTs in a convenient and accessible way and for providing additional context. Also, an extended account can present an alternative framework for accounting for the unpriced services that free online platforms supply to households. Households' consumption of the free services of digital platforms funded by advertising and the collection of data is a major element of the gains in economic welfare associated with the digital transformation.

1. THEMATIC ACCOUNT ON THE DIGITAL ECONOMY

- 22.111 Compiling a thematic account on the digital economy and the related digital supply and use tables (SUTs) can bring visibility to activities, products and transactions affected by digitalization that are subsumed in broader aggregates in the standard classifications of the national accounts. A digital economy thematic account provides alternative aggregations and additional detail on products and transactions to separately identify the digital segments of industries, digital products, and digital transactions and can highlight key information from the digital SUTs. The conceptual framework of the digital SUTs helps guide the compilation of the digital economy thematic account. (For general background on the purpose of thematic accounts and the use of SUTs to compile a thematic account, see chapter 38.)
- 22.112 In developing a digital economy thematic account, the items that are most important for understanding the impact of digitalization should be prioritized. These items are likely to include breakouts of digitally ordered and digitally delivered transactions, production and intermediate consumption of cloud computing services and digital intermediation services. They may also include the output and value added of the industries supplying ICT goods and software,

business-to-business and business-to-household e-commerce margin services, and other digital services such as cloud computing services, telecommunications and internet services, digital intermediation services, digital advertising services, and digital financial services. . The suppliers of digital products might be classified into providers of digital infrastructure (digitally enabling industries), e-tailers, data- and advertising-driven platforms, digital intermediation platforms, financial service providers primarily operating digitally, and other service providers operating only digitally.

- 22.113 The thematic account should summarize the uses of ICT goods and digital services, including uses for own-account and purchased investment. The fixed capital formation that enables digital activity is also relevant for understanding the impact of digitalization. In addition to ICT equipment, software, and data, this fixed capital includes the infrastructure of data centers and networks.
- 22.114 Trade flows of ICT goods and digital services are important to include in the thematic account on the digital economy. A decomposition of exports and imports by major category of products may also be important to report to show the source of the differences between domestic production and domestic uses of the items in these categories. International transactions that are digitally ordered or digitally delivered are additional aspects that should be highlighted in the thematic account. The indicators in the digital economy thematic account need not be limited to products within the SNA production boundary. The free services that digital platforms supply to households valued by their cost of production can be reported as an addendum item.

14. DIGITAL SUPPLY AND USE TABLES

- 22.115 The digital supply and use tables (SUTs) analyze the impact of digitalization along the three dimensions of the nature of the transaction (digitally ordered, digitally delivered, or intermediated by a DIP) , products, and industries by adding new detail and aggregations to the standard SUTs. This approach ensures that the framework for analyzing digital transactions, products and industries is aligned with existing classifications and takes advantage of those classifications. The supply table classifications enable a decomposition of the domestic and imported sources of supply of digital products, and the use table classifications enable a decomposition of the uses of digital products for intermediate consumption, final consumption, investment, and exports.
- 22.116 As conceptually defined, the digital SUTs have cells that can accommodate all potentially relevant transactions, which makes the number of possible entries in the new rows and columns large. To reduce the compilation burden and source data requirements, a set of high priority aggregates has been identified. The recommended high priority items include (a) decompositions of expenditures by the nature of the transaction, (b) output and intermediate consumption of digital intermediation services, cloud computing services, and ICT goods and digital services, and (c) the output and gross value added of digital industries. (For detailed guidance on compiling digital SUTs, see the *OECD Handbook on Compiling Digital Supply and Use Tables*.)
- 22.117 E-commerce transactions are defined by digital ordering using methods specifically designed for the purpose of receiving or placing orders. To provide insight into digitally ordered transactions, the digital supply and use tables include new rows that distinguish these transactions, along with a further decomposition into transactions ordered directly from a counterparty, transactions ordered through a resident digital intermediation platform, and transactions ordered through a non-resident digital intermediation platform.
- 22.118 Digital delivery of services is also an important aspect of digitalization. The digitally delivered portion of the output of domestic industries and imports may be shown in “of which” columns in the digital supply table, and digitally delivered portion of household final consumption and exports may be shown in “of which” columns in the digital use table.
- 22.119 To bring visibility to the output and intermediate consumption of digital products, new rows are

- added to the SUTs on ICT goods, cloud computing services, digital intermediation services, and all other digital services. An addendum on products beyond the standard production boundary may also have rows for free services of digital platforms and free services of online communities of volunteers. Including imputed values of these free services in the digital SUTs will facilitate compilation of an extended account on free digital services.
- 22.120 The output and gross value added of digital industries and related industries are shown by incorporating seven new columns in the digital SUTs. One column contains the digitally enabling industry, which comprises the producers of ICT goods and services enabling the use of information technology. The other six columns cover online platforms funded by advertising and data collection, digital intermediation platforms, producers that depend on digital intermediation platforms, e-tailers, financial service providers primarily operating digitally, and other producers operating only digitally.
15. EXTENDED ACCOUNT TO INCREASE THE VISIBILITY OF THE FREE SERVICES OF DIGITAL PLATFORMS CONSUMED BY HOUSEHOLDS
- 22.121 Free online platforms funded by advertising and collection of users' data have become part of daily life and the time spent by households using platforms offering free services such as social media, search, entertainment, and information suggests that households place a high value on the free services of digital platforms funded by advertising and data collection. An estimate of the value of these free services is therefore relevant for understanding and analyzing the impact of digitalization on the growth of household consumption of goods and services. Yet the value of the free services of platforms funded by advertising and collection of users' data is not estimated as part of compiling the standard sequence of economic accounts because the cost of supplying these services is implicitly included in the price of the advertising services and data sold by the platform and the platform's own-account investment in data assets. In effect, in the standard sequence of economic accounts, the digital platform is itself the user of the free services, and the benefits that households derive from these services are merely a positive externality of the production of advertising services and data assets.
- 22.122 To provide information on households' direct consumption of the "free" services of digital platforms funded by advertising and data collection, compilation of an extended account showing the value of these services is encouraged. Extended accounts are a flexible tool for presenting concepts that extend SNA boundaries, including expanded measures of economic activity and household final consumption expenditures that extend the production boundary.
- 22.123 Households' consumption of the free services of advertiser-funded digital platforms can be included in an extended account as part of expanded measures of household final consumption expenditures and output. Although letting these services be consumed twice, once by households as they use the platform and a second time by the platforms as they produce advertising services and data assets, would cause double counting in a measure GDP, expanded measures of economic activity and household consumption that reflect the simultaneous consumption of these services by the households using the platform and by the platform itself are analytically useful .
- 22.124 In the framework of the extended account, households' consumption of unpriced services produced by the platforms' software and hardware assets in exchange for granting a license to collect data on their behavior and characteristics (or observable phenomena – OP) can also be included. The licenses to collect the data are viewed as a payment in kind for the platform's unpriced services and the platform's unpriced services are viewed as a payment in kind for the licenses to collect the data. However, agreeing to the collection of data on one's OP is not a service, so the platform's imputed payment for the license is a rent rather than a consumption expenditure.
- 22.125 The imputed values of items that are bartered for each other (the unpriced platform services consumed by households and the opportunities for the platform to collect the households' data)

must be the same. Consequently, there are four theoretical ways to value the platforms' unpriced services: (1) the platform's cost of producing the free services, (2) the value that the households place on the free services, (3) the value that the households place on the privacy of their data that they give up, and (4) the economic benefits that the platforms derive from users' attention and the opportunity to collect their data. The need for consistency within the system of measures of the transactions of the free platforms makes the cost of producing the services the most suitable of these four theoretical values for the extended account. Own-account investment in data assets is usually measured by the cost of production approach, so valuing the licenses to collect data on users' OP by the cost producing the platform services exchanged for these licenses would be consistent with the general approach to measurement of own-account investment in data assets. Cost of production is also more practical to estimate than the other three theoretical values of the platform's free services.

- 22.126 Although the payment in kind from the platform to the households consists of services produced by the platform, the access given to the platform collect data on the households' OP that is received in return is not a service produced by the households so the imputed payment for the license is classified as a rent (see paragraph 22.21? for additional details). Licensing collection of data on one's OP is not a production activity – observing and recording a subject's characteristics and actions does not represent consumption of the services of a produced fixed asset. However, if households actively assist in the collection of their data, the steps they take to assist with the data collection can be considered a production of services (but such cases are rare).
- 22.127 The expanded measures of free platforms' output and value added in the extended account will include the imputed value of the free services consumed by households. The balance of primary incomes of the platforms will, however, be unchanged. The platforms' extra value added from imputed sales of services to households will equal the platforms' imputed payments of rent for the licenses to collect households' data. Household saving will also be unchanged because the imputed household consumption expenditures on platform services will equal households' imputed income from licensing collection of their data.
- 22.128 In addition to allowing collection of data on their OP, households provide economic benefits to free platforms by creating and supplying user-generated content without monetary compensation. In the standard sequence of accounts, households that receive monetary payments for the content they post online are unincorporated household enterprises producing services, but content supplied without payment is beyond the production boundary. To increase the visibility of households' unremunerated creation of user-generated content, the extended account can treat user-generated content that is uploaded without monetary payment as part of a barter transaction in which the platform user receives unpriced platform services in exchange for the user-generated content. Under this alternative approach, the platform's unpriced services are used by the content creators as inputs to produce the user-generated content and the user-generated content is used by the platform to produce data assets. The net effect is to increase in the measure of the platforms' own-account investment in data assets.

Chapter 17. Islamic Finance

(New SNA/BPM chapter)

Chapter 26: Islamic Finance

BPM7 Chapter 17 – Islamic Finance

A. GENERAL OVERVIEW

1. BACKGROUND

- 26.1 Islamic finance is distinguishable from traditional finance in several ways, in relation to both financing and insurance activities. Islamic financial institutions, as well as financial institutions with Islamic windows that offer both conventional finance and Islamic finance, are bound by Shari'ah principles. The principles and rules of Shari'ah (or Islamic law) include prohibitions on *Riba* (usually translated as interest), *Gharar* or uncertainty (sometimes translated as “excessive uncertainty”), *Maysir* (gambling), as well as short sales or financing activities that are considered harmful to society. Islamic insurance follows these same principles and is further based on the notion of mutual assistance.
- 26.2 As a result, in economies in which Islamic finance is prevalent, financial corporations have developed specific forms of financing arrangements that are consistent with these principles. In addition, Islamic financial standard setting bodies, including the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) and the Islamic Financial Services Board (IFSB), have developed standards on accounting, auditing, and related regulatory standards and frameworks, to promote greater harmonization of Islamic finance reporting practices across countries.
- 26.3 The historical development of the System of National Accounts, external sector statistics, and other macroeconomic statistics have largely reflected the predominance of conventional financial structures and terminology. Given the rapid growth of Islamic finance in recent years, as suggested by studies and the Islamic Finance Development Indicator (IFDI), it is significant enough to affect the quality of different areas of macroeconomic statistics in several countries. This situation can affect the international comparability of these statistics. To address this, this chapter provides guidance on the statistical treatment of Islamic finance focusing on the national accounts and external sector statistics. More general guidance on financial corporations is provided in Chapter 29.

2. OUTLINE OF THE CHAPTER

- 26.4 This chapter presents guidance to properly account for Islamic finance and insurance arrangements in the national accounts and external sector statistics. In doing so, it elucidates by instrument the special types of financing arrangements (sales-based contracts, lease-based contracts, equity-based contracts, or profit/loss sharing) that characterize Islamic finance. It reviews distinct operations of Islamic finance and insurance and addresses issues such as the nature of income on certain Islamic financial instruments (included among deposits, loans, debt securities), the sector classification of Islamic financial institutions, the measurement of output, including FISIM, the treatment of Islamic insurance-like business as well as the instrument classification of select Islamic financial arrangements. This chapter also briefly clarifies the concept of economic ownership in the case of Islamic Finance. The structure of the chapter is as follows:

Part B reviews financial institutions and sectoring; Parts C and D provide guidance on the measurement of output and income, respectively; Part E presents Islamic financial arrangements, and how these are reflected in macroeconomic financial instruments; and Part F covers economic ownership.

B. ISLAMIC FINANCIAL INSTITUTIONS AND SECTORING

1. SOME BASIC FEATURES OF ISLAMIC FINANCE

- 26.5 Important differences exist between conventional and Islamic finance. Islamic finance must follow certain “Shari’ah” standards, hence it is often called “Shari’ah-compliant”. The general principles of Islamic finance are: the prohibition of collection and payment of interest or other predetermined returns on investments; the encouragement of investment in real economic activities or trading in goods and services for profit; sharing rewards and risks between parties involved; the avoidance of profiting from trading in financial assets or “using money to make money”; the discouragement of excessive uncertainty, which may prohibit the use of many types of financial derivatives; and the prohibition on the financing for certain activities that are forbidden by Islam, such as alcohol or drugs. In addition to commercially driven activity, Islamic principles also emphasize the importance of charitable giving, whether through the mandatory welfare due (or *Zakah*) or voluntary charity (*Sadaqah*). Both forms of giving can (but do not have to) be implemented through a type of endowment trust known as a *Waqf*.
- 26.6 To adhere to these principles and to simultaneously accommodate the financing of economic activity, Islamic financial corporations have developed various financing arrangements that are mapped to more generic financial instruments. These financing arrangements are often based on trading models or profit and loss sharing models involving underlying real non-financial assets. . The recording of such non-financial assets may be reflected on the balance sheet of the Islamic financial institution or an entity which it owns when the (legal) ownership is acquired but this may not be the case for economic ownership as applied in the sequence of economic accounts. Economic ownership of any non-financial assets and changes in economic ownership are discussed in Section F and are closely related to the characteristics of the financing instruments discussed in Section E.
- 26.7 In addition, Shari’ah-compliant activities should be segregated from non-compliant activities and funds (i.e., not following Shari’ah principles). This gives rise to some specific treatments. First, the financial statements of Islamic windows of conventional financial institutions are separated from their regular financial activities. Further, off-balance sheet restricted investment accounts of banks and other depository corporations which comply with Islamic finance accounting standards are to be classified as separate institutional units.
- 26.8 Second, there is a distinctive arrangement in which a charitable institution contracts with a fund manager to establish a dedicated, open-ended asset **Waqf Fund** managed according to Shari’ah principles, to which the public can make donations by “purchasing” units of the fund. The charitable institution is the beneficiary of the fund – that is, it is the economic owner of all the units of the fund. Under the agreement, the fund will reinvest or distribute specified amounts of the profits to the beneficiary, and it will charge fund management fees. The donor’s investment in the fund constitutes an irrevocable donation to the beneficiary, and the function of the fund is to provide financial management of the beneficiary’s portfolio of assets. These types of funds are also required to keep a complete set of accounts and constitute institutional units.
- 26.9 Third, there are various schemes in different countries for supporting or enabling pilgrims to save for, or to undertake the Islamic pilgrimage (or *Hajj*). The term **Hajj Fund** is used to describe the case of a market enterprise that undertakes, as a significant part of its activities, the management of long-term savings open to individuals intending to undertake the Hajj pilgrimage in compliance with Shari’ah principles. Such funds are considered as institutional units if they are legally established entities with an autonomous management and keep a complete set of accounts and are classified separately within the financial corporations’ sector. For Hajj savings to meet the

conditions of deposits, it is likely that the fund would be a regulated deposit-taking entity (such as a bank or similar entity) with the principal value of the deposit typically protected to some degree. This may not be the most common scenario in many countries, where they are usually treated as non-money market investment funds. Although a **Hajj Fund** might undertake certain secondary non-financial activities, such as the provision of travel, accommodation and related services to pilgrims planning for the Hajj, these activities are expected to be far less significant than its financial activities. Such non-financial activities would normally involve a separate institutional unit outside of the fund.

2. ISLAMIC BANKING AND OTHER FINANCIAL ACTIVITY, INCLUDING SECTORING

- 26.10 The following guidance focusses on the subsector classification of Shari’ah-compliant financial institutions within the financial corporations’ sector. These subsectors may also include conventional financial institutions as described in Chapter 29. The central bank (S121) and pension funds (S129) are not explicitly discussed below, as these are not specific to Islamic finance except perhaps for some of their investments (discussed in Section E).

Deposit-taking institutions except the central bank (S122)

Organizational considerations

- 26.11 This subsector is dominated by banks and can include both Islamic banks and other depository corporations, as well as conventional banks and other deposit-taking institutions with Islamic windows. **Islamic banks and other depository corporations** manage funds received to produce returns through investments or financing of transactions for customers. Such operations are sometimes described as ***Mudarabah*** transactions, the customer is a capital provider, and the financial institution is the entrepreneur (*Mudarib*) that invests the capital. The main inflows include **unrestricted funds** (discussed in Section E) that are commingled with other bank funds, in the same way as deposits in conventional banks. However, unrestricted funds are invested in Islamic financial instruments.
- 26.12 On the other hand, **restricted funds** are managed separately by the bank and segregated from other funds received and typically treated as off-balance sheet – that is, excluded from this subsector. The contracts under which these accounts are created do not give the bank authority over decisions regarding the use and distribution of the funds it receives from account holders. Rather, the bank can only make decisions on the administration and management of the accounts. The only link between the bank’s accounts and the off-balance sheet restricted investment accounts is the share of investment income from these investment accounts (as *Mudarib*), which is recorded as a single item in the bank’s income statement. Restricted funds, while part of the Islamic banks’ business, are almost always treated as a separate institutional unit and included among investment funds.
- 26.13 **Islamic windows of conventional banks and other depository corporations** that accept deposits are also confined to invest the deposits in Islamic financial instruments only. The funds provided under such contracts have the characteristics of deposits, and they provide financing to borrowers using various Islamic financial instruments. Conventional banks are required to maintain a full set of accounts, including a balance sheet, for their **Islamic windows**. They are also obliged to have a Shari’ah Supervisory board, and may have an independent management separate from that of the conventional banks that run them. The reason for this is that the management of the windows requires the existence of a Shari’ah Council as part of its mission to ensure that the funds are not mixed with those funds of the conventional banks. Accordingly, Islamic windows in these cases are considered as institutional units independent of the conventional banks, but within the depository corporation’s subsector.

Basics relating to sources and uses of funds

- 26.14 Unlike conventional banking, there is no common interest rate (nor interest rate ladder) applicable to Islamic deposits that determines the depositors' returns. Islamic banks and Islamic windows of conventional banks offer Islamic deposit accounts that are closely parallel to conventional accounts, but the banks are also heavily funded by accounts in which returns/losses are shared between the bank and the depositor/investors. Under a profit-sharing model (i.e., participation account), an Islamic bank can withhold part of the depositors' net profits as a profit equalization reserve. Under SNA accrual rules, these profits should be treated as distributed and subsequently reinvested into the reserve. The depositors in these arrangements therefore acquire a component of the bank's equity or a different type of bank liability.
- 26.15 Diverse financial instruments, discussed in Section E, can be thought of as sources and uses of funds. Sources of funds are used to generate revenues in different ways - financing of sales, leasing, fees, equity participation, or investment. Some instruments do not have conventional bank equivalents. The returns to Islamic banks and windows on their financing and investments are not guaranteed, but rather depend on the success or failure of their ventures. Returns (and sometimes losses) are divided between the bank and the depositors based on the specific types of Islamic financial instruments used.

Investment funds (S123 and S124)

- 26.16 Islamic Investment funds are collective investment schemes that issue shares or units to the public, and that are split into two subsectors within the financial corporations' sector. **Money market funds** (MMFs) are invested primarily in Islamic bank deposits. **Non-money market investment funds** (non-MMF), invest in a wider range of Islamic securities.
- 26.17 As noted above, the off-balance sheet **restricted investment accounts** which comply with Islamic finance accounting standards are classified as non-MMF investment funds. This is because the cash of the account holders are placed in an investment fund which is managed independently from the Islamic bank, through which these funds are channeled. In addition, a complete set of accounts for the investment fund, including the financial position which shows the equity of the account holders, is maintained. These restricted Islamic accounts should be treated as investment funds because the clients' money is held in segregated investment funds with any losses borne by the providers of the funds, except if these are due to breach of trust or misconduct by the units managing the funds. Furthermore, like conventional investment funds, these accounts distribute the profits from investments to investors in proportion to the value of their investments.
- 26.18 Collectively organized **Hajj Funds** are also allocated to the non-MMF subsector, provided the general conditions for this classification are met. These conditions include that they are legally established entities with autonomous management, and that they maintain a complete set of accounts. These funds, in concert with their long-term saving character, are not restricted to financial investments and savers bear the risks and rewards of the investments' performance.

Other financial intermediaries except insurance corporations and pension funds (S125)

- 26.19 Islamic investment banks (that do not accept deposits) and investment companies are classified as other financial intermediaries. These entities typically provide Sharia'ah -compliant (advisory) investment banking services, such as structured finance on large projects or financial leasing (such as *Istisna'a* or *Ijarah*), investment placement activities, raising funds in equity and debt markets (often from joint *Mudaraba*), as well as trade finance (often *Murabaha*). Entities involved in installment sales (such as *Bai Muajjal*) may also be classified in this subsector.

Financial auxiliaries (S126)

- 26.20 **Takaful (insurance) operators** often constitute the main Sharia'ah-compliant business to be classified as financial auxiliaries. These entities (see paragraphs 26.25-26.26 and 26.44) manage and administer **Takaful (insurance) funds** on behalf of the participants by charging fees to cover their costs. They do not take economic ownership of the assets and liabilities of these funds. Financial auxiliaries may also relate to managers of investment funds, but not the assets they manage.

Captive financial institutions and money lenders (S127)

- 26.21 **Waqf Funds** are a religious/charitable endowment, with the donated assets held by a charitable trust. A Waqf is a charitable institution that contracts with a fund manager to establish a dedicated **Waqf Fund**, which is open to the public to make donations by purchasing units of the fund. This reflects the fact that the beneficiary is the sole client and that these vehicles are like endowment funds. The financial instrument classification is that the beneficiary has an *Other equity* (F519) claim on the assets of the fund. Purchases of units in the fund by donors should be recorded as miscellaneous current transfers (D75) by donors to the beneficiary. These funds are classified as captive financial institutions.
- 26.22 This subsector can also include any Sharia'ah-compliant money lenders.

3. INSURANCE CORPORATIONS (S128)

- 26.23 There are some parallels between conventional and Islamic insurance (**Takaful**) and re-insurance (**Re-takaful**). At the same time, there are notable differences in the business arrangements. **Takaful** and **Retakaful funds** are included in the insurance corporations' subsector, alongside conventional insurance companies and Islamic windows of conventional insurance companies. **Takaful** and **Retakaful funds** share characteristics with insurance and reinsurance in the SNA, as they collect contributions (which can be considered as the equivalent of premiums in conventional insurance) from participants and have reserves which belong to them. Islamic windows are also included in this subsector, as separate institutional units, given that they maintain segregated financial statements for this activity. In the case of *Light Takaful*, where the arrangements are less complex and do not have to be based on *Tabarru* principles, there is no segregation of operators from funds as is the case with conventional insurance. As noted above, **Takaful operators** with segregated financial statements are included among financial auxiliaries.

Some basic features of Islamic insurance

- 26.24 In accordance with Islamic finance principles, **Takaful** business arrangements avoid uncertainty (sometimes translated as "excessive uncertainty"), gambling and predetermined interest-based investments. The term Takaful means "mutual guarantee". Islamic insurance can therefore be defined as the process in which a group of people — that is, the participants — who face certain risk(s) agree that each of them contributes a specific amount (based on cooperation) to a non-profit fund that is to be used for compensating anyone of them and/or their beneficiaries for the potential loss encountered if the risk in question materializes. In a such an arrangement, the contract is based on **mutual assistance** (*Ta'awun*) and **reciprocal donation** (*Tabarru'*), rather than the conventional commercial relationship between an insurance company and a policyholder. In conventional insurance the insurer contracts to provide protection (incurs an obligation) against certain losses by leveraging the accumulated premiums paid by the policyholder (insured), including the returns on investment. In contrast, the "participants" in a **Takaful** scheme are considered simultaneously as the insurer and the insured, since the contributions into the **Takaful fund** belongs to the participants and the operator just manages on their behalf.

- 26.25 Islamic insurance is distinguished by two types of contractual relationships. The first is the underlying contract used among the group of participants to govern their relationship on the basis of cooperation and solidarity. Members of the group agree to renounce a certain amount of their contribution paid to a **Takaful fund** as a donation in order to provide mutual indemnity to any fellow participant who suffers a loss covered under the policy. In other words, the group of participants agree to guarantee each other and make contributions to the fund instead of paying premiums to cover themselves individually. The fund is the account established by the company (**Takaful operator**) as the insurance entity to receive (own) the contributions and oversee the reserves and the returns on investment.
- 26.26 The second is the contractual relationship between the group of participants and the **Takaful operator** appointed by the participants to manage and invest the funds for them. The company is not a typical insurer that takes on a liability. In fact, the operator/manager corporation is usually not part of the insurance sector, but rather part of financial auxiliaries. Generally, the operator manages the relationship and maintains separate accounts with respect to the claims (rights) and obligations of the policyholders. Both the operators and the funds maintain separate accounting records, to conform to Islamic finance accounting standards. However, there is one exception to this rule in the case of *Light Takaful*, which presents consolidated financial statements and looks more like conventional insurance arrangements.
- 26.27 The **Takaful** arrangements can encompass several types of structures that govern the relationship, such as profit sharing, payment of fees, return, or a combination of these elements. When a contract involves profit sharing, it is a combination of a *Tabarru'* contract and agency and/or a profit-sharing contract. For the various **Takaful** structures, it is important to emphasize that contributions, returns on investment and the resulting surplus belong to the participants collectively – that is, the returns on investment of contributions belong to the policyholders as a group, after deduction of the administrator's share. Therefore, any surplus can be distributed among participants or given to charity. If claims paid from the fund exceed the amount of premiums, the participants should increase their contributions. The policyholders make the contributions, receive protection (indemnities) against the materialization of risk that has been insured, and can also receive a share of surplus.

Takaful types

- 26.28 Takaful business types cover general plans and family plans. **General Takaful** provides protection against material loss or any form of damage on a short-term basis (akin to non-life insurance). **Family Takaful** offers a combination of protection and long-term savings, usually covering a period of more than one year. In general, **Family Takaful** is deemed to be a composite plan offering both life and non-life insurance schemes unless specific regulation requires that these schemes be registered separately.
- 26.29 **Retakaful** is an extension that supports **Takaful** business activities as a form of reinsurance based on Islamic finance principles. It aims to mitigate the risks of business loss of Takaful business and to increase the capacity of direct insurance, in particular for high value properties. Considering the relatively small and still developing **Retakaful** domestic market in many Islamic economies, this could lead to a significant cross-border trade in such activities. In many economies, the domestic **Takaful** and **Retakaful** industry is likely to provide services to non-residents. Conversely, resident units can also purchase these same services from non-resident providers. This implies the need to account for such transactions in the external sector statistics.

Takaful models

- 26.30 The underwriting surplus in **Takaful** arrangements is the amount calculated as the excess of total premium contributions of the policyholders-participants during the financial period over the total indemnities in respect of claims incurred during the period, net of **Retakaful** and after deducting

and changes in technical provisions. The surplus should be disposed of in a way that serves the common interest of the participants such as accumulation of reserves, reduction of the contributions, charitable donations and/or distribution among the participants. This also depends on the adopted business model that defines whether the surplus should be transferred only to participants, shared with operators or retained in the fund.

- 26.31 Various **Takaful** models have been designed according to the underlying contracts signed between the participants and the operator, which first and foremost defines how the latter is compensated for the management of the takaful fund. Four main business models are distinguished:
- **Mudaraba-based Takaful**: the operator is ensured a share of profits generated from the investments of takaful funds;
 - **Wakalah-based Takaful**: the operator is paid a fee as a percentage of participants contributions;
 - **Wakalah-Mudaraba-based Takaful** or hybrid model: The operator is ensured both a fee as a percentage of contributions and a share of profits; and
 - **Waqf Takaful**: In contrast to the previous models, provides surplus which is not transferred to the participants but is retained in the **Takaful fund** by the operator.
- 26.32 In general, the business models adopted for **Family Takaful** differ from those offering only **General Takaful** in terms of disaggregation of the fund into the Participants' Risk Fund (PRF) and Participants' Investment Fund (PIF). In family arrangements, participants contribute to the common pool of funds of which a portion is invested as PIF for the purpose of investment and/or savings; and the other part of contribution is allocated to the PRF to meet claims by participants on the basis of mutual assistance or protection intended, settle **Retakaful** charges, or allocated to reserves.

C. OUTPUT OF ISLAMIC FINANCIAL INSTITUTIONS

INTRODUCTION

- 26.33 The methods to calculate the output of Islamic financial institutions depend on how they are allocated to institutional sectors given their financial activities. Methods can include explicit fees, sum of costs, implicit financial services on loans and deposits, or a combination of approaches. This section first discusses Islamic financial institutions excluding Islamic insurance, and then turns to Islamic insurance.

1. MEASURING OUTPUT OF ISLAMIC FINANCIAL INSTITUTIONS (EXCLUDING ISLAMIC INSURANCE)

- 26.34 There are different methods used to measure output across the suite of Islamic financial institutions. Some of these employ the methodology for implicit financial services on loans and deposits, in part or in whole, to account for the implicit services provided. This approach, as it applies to Islamic finance is discussed below.

Methodology for implicit financial services on loans and deposits in Islamic Finance

- 26.35 The implicit financial services on loans and deposits methodology for Islamic depository institutions parallels that of conventional financial institutions (see the discussion in paragraphs 7.179-7.188). This reflects the fact that, for some types of financial institutions, explicit service charges alone may not account for the full value of their services. Part of the compensation for the provision of services

may be implicitly included in the difference between the returns on the funds provided to those that require funding and the returns on the funds provided by those with surplus funds. In the process of intermediating funds between parties with surplus funds and those that require funding, the relevant financial institutions provide services to both parties. The methodology for implicit financial services on loans and deposits provides a way to measure the services that are not explicitly charged for.

Reference rates and instrument scope

- 26.36 The general approach is that it is also possible to determine a reference rate, in the case of Islamic implicit financial services on loans and deposits, which reflects a service-free rate and can be used to derive the service element on deposits and loans with varying characteristics. More specifically, in line with conventional banking, the implicit financial intermediation services provided by Islamic deposit taking corporations can be measured as the difference between the return rate paid to banks by borrowers and the reference rate plus the difference between the reference rate and the return rate actually paid to depositors. The term “return” is used to describe the broader interest-alternative returns on (non-equity) Islamic financial instruments (discussed in Section D).
- 26.37 This approach could be augmented by using different reference rates for conventional and Islamic Shari’ah-compliant finance, in recognition of different risk profiles. Whatever the case, different reference rates should be applied for at least two groups of currencies (national and foreign currency) in cross-border transactions of Islamic deposits and loans – that is exports and imports of such implicit services. The rate should be taken from the financial markets of the home market of the currency.
- 26.38 With respect to the issue of one or more reference rates, the objective testing results (conducted in 2023) with a select group of Islamic countries generally indicated that the estimates of nominal implicit financial services on loans and deposits and their annual growth rates did not differ significantly between conventional and Islamic finance. Thus, while the principles of Islamic finance prohibit the payment of interest, the nature of financial intermediation services of conventional and Islamic deposit-taking and lending seems to be broadly similar. Accordingly, it is recommended that only one reference rate be used to calculate implicit financial services on loans and deposits which are in the same currency, unless there is evidence to suggest that a different reference rate should be used to calculate implicit financial services on Islamic deposits and loans (see paragraph 7.183).
- 26.39 These Islamic implicit services apply to total loans and total deposits (where relevant), rather than applying a more complex instrument-by-instrument approach. The latter was considered given that some Islamic instruments pay no investment income (see Section E below for a description of Islamic financial instruments).

Measures of output for different types of Islamic Financial Institutions

- 26.40 The various methods to measure output for Islamic Financial Institutions are summarized below. In the case of implicit financial services on loans and deposits, the terminology reflects that of investment income (discussed in Part D).

Central bank (S121)

- 26.41 For the Central bank (S121), monetary policy services, supervisory services and other services (financial stability, managing the payments services) are collective services. Central banks do not undertake intermediation services in the traditional sense. Central banks are atypical financial

intermediaries which take on liabilities and engage in lending, but for the purpose of monetary policy and other public functions. As a result, all of their services are considered non-market output, and they are calculated at the sum of costs (see paragraphs 7.165-7.169).

Deposit-taking corporations except the central bank (S122)

- 26.42 Deposit-taking corporations (S122) include Islamic banks and Islamic windows in conventional banks. In these cases, financial intermediation services are estimated as a combination of explicit fees and commissions (direct services) and the implicit financial services on loans and deposits. For the latter, the services on loans and deposits are calculated as follows:

$FISIM = (r_L - rr) \times Y_L + (rr - r_D) \times Y_D$, where,

r_L - the lending return rate

r_D - deposit return rate

rr - reference rate

Y_L - average stock of loans

Y_D - average stock of deposits

Money market and non-MMF Investment funds (S123 and S124)

- 26.43 In the case of both Sharī'ah-compliant **Money market funds (S123)** and **Non-money market investment funds (S124)**, the output is treated in the same way as conventional investment funds. Therefore, output is estimated as the sum of various fees that these funds charge investors on transactions and positions. This includes purchase and redemption fees, exchange fees, account fees, and operating fees. However, for **Hajj Funds** and off-balance sheet restricted investment accounts output is measured as sum of costs, except in the case of implicit services on any loans on the financial statements such as **Murabaha** or **Ijarah** (see Section E for a discussion of Islamic financial instruments) may need to be calculated.

Other financial intermediaries except insurance corporations and pension funds and Sharī'ah-compliant money lenders (part of S127 below)

- 26.44 Islamic investment banks and investment companies are included in **Other financial intermediaries (S125)**. For these types of institutions, output includes both explicit and implicit fees. In addition, for any Sharī'ah-compliant money lending services included in **Captive financial institutions and money lenders (S127)**, measures of output combine explicit charges and implicitly measured financial services (IFS). For these types of financial institutions, the latter service element can be calculated as follows:

$IFS = (r_L - rr) \times Y_L$, where

r_L - the lending return rate

rr - reference rate

Y_L - average stock of loans

Financial auxiliaries (S126)

- 26.45 For **Financial auxiliaries (S126)** engaged in the management of Sharī'ah compliant investments and funds brokerage, such as **Takaful funds** and investment funds, output is measured as the explicit fees charged to clients. For example, the fees payable by the **Waqf Fund** to the fund manager are classified as the output of this financial subsector. In the case of **Takaful operators** included in this subsector, the explicit fees approach is also used. Output is equivalent to the **Wakalah** fees they charge to administer the funds and/or the share of profits earned from the investment of those funds, depending on the structure.

Captive financial institutions and money lenders (S127)

- 26.46 For other Sharia'ah compliant institutional units included in **Captive financial institutions and money lenders (S127)**, output is measured as explicit fees or sum of costs. In the case of **Waqf Funds** in this subsector, output is typically measured as the sum of costs. Although the associated fees are costs that are contractually payable by the fund rather than by the beneficiary, they are shown as payable by the beneficiary to the fund because they are payable out of profits (with **Waqf Fund** profits as property income to the beneficiary). For money lenders the implicit financial services on loans are calculated as noted above (26.43).

2. ISLAMIC INSURANCE OUTPUT

- 26.47 The services provided diverge from those provided by conventional insurance, reflecting the fact that Islamic insurance processes are arranged differently than those of conventional insurance. The Islamic service component would be identified under the **Takaful** contract and different options may be considered depending on the business model adopted. In addition, the output of operators and funds reflect that they are separately classified as institutional units, except in the case of **Light Takaful**.
- 26.48 **Takaful operators** manage, administer and invest the funds on behalf of the participants by charging fees to cover their costs. In this case, output is measured as the **Wakalah** fees they charge to administer **Takaful funds** and/or the share of profits earned from investing these funds, as noted above under financial auxiliaries.
- 26.49 For **Takaful/Retakaful funds**, including both family and general plans, output is measured as the sum of costs. This is the **Wakalah** fees they pay to takaful operators and/or the share of profits payable to takaful operators plus any other intermediate consumption. Given the similar economic features between **Takaful funds** and **Takaful windows**, the output of windows is also measured as the sum of costs. Given that **Light Takaful** (no distinction between operators and funds) is more like conventional insurance arrangements the methods described in paragraphs 7.204 to 7.220 in SNA2025 should be used to measure output.

D. THE NATURE OF RETURNS ON ISLAMIC INSTRUMENTS IN THE ALLOCATION OF INCOME ACCOUNT

1. BACKGROUND

26.50 In the context of Islamic finance, the prohibition of 'riba' (normally translated as interest) means that a provider of finance cannot impose a fixed or unconditional finance charge that is independent of the borrower's use of the funds. Sometimes, a provider of funds may expect a reward from the borrower on a discretionary basis. For these reasons, terminology such as *profits*, *gifts* or *returns* is typically used instead of interest in Islamic accounting. However, to better integrate into the SNA/BPM, a general term describing such types of returns is required. A generic term like "similar returns" appended to interest is the option chosen. Interest and similar returns can apply to other situations of such non-conventional finance as well as to Islamic Finance.

2. RETURNS ON ISLAMIC INSTRUMENTS

Interest and similar returns

26.51 The broader SNA/BPM term ***Interest and similar returns*** (see paragraph xx.xx) accommodates the returns associated with Islamic finance. The concept of "similar returns" complies with Shari'ah principles and is used to describe the broader interest-alternative returns on certain Islamic debt instruments. Retaining the term "interest" in the proposed terminology ensures continuity with the current terminology in the SNA (and BPM) to describe the investment income on conventional deposits, loans, debt securities, and exceptionally in other accounts receivable and payable (see paragraph 25.192). This approach enables the integration of Islamic financial instruments and their associated income within the existing macroeconomic statistical frameworks and eliminates the need for developing alternative classification frameworks for Islamic finance. The Islamic financial arrangements that generate investment income are discussed in Section E below. Some of these constitute equity-like instruments and generate equity-like return (e.g., dividends), but do not require introduction of new terminology.

26.52 There are two key benefits to this approach. First, it preserves the universality of international statistical standards; and second, it accommodates economies with significant Islamic financial activities and incorporates the investment income for relevant Islamic financial instruments. The table below displays additional and supplementary details related to returns on Islamic instruments in SNA and BPM (please see Annex I.

| Earned income account in SNA | Earned income account in BPM |
|-----------------------------------|---|
| D4. Property income | Investment income |
| D41. Interest and similar returns | Direct investment |
| D411 Interest | Income on equity and investment fund shares |
| Deposits | Dividends and withdrawals from income of quasi-corporations |
| Loans | Reinvested earnings |
| Debt securities | Interest and similar returns (D41D) |
| D412 <i>Similar returns</i> | |
| <i>Islamic deposits</i> | |

| | |
|--|--|
|  <p><i>Islamic loans-financings</i></p> <p><i>Islamic debt securities</i></p> <p>D42. Distributed income of corporations</p> <p>D43. Reinvested earnings on direct investment</p> <p>D44. Investment income disbursements</p> | <p>Portfolio investment</p> <p>Income on equity and investment fund shares</p> <p>Dividends on equity other than investment fund shares</p> <p>Investment income attributable to investment fund shareholders</p> <p>Interest and similar returns (D41P)</p> <p>Other investment</p> <p>Withdrawals from income of quasi-corporations</p> <p>Interest and similar returns (D41O)</p> <p>Investment income attributable to policyholders in insurance, standardized guarantees, and pension funds</p> <p>Reserve assets</p> <p>Income on equity and investment fund shares</p> <p>Interest and similar returns (D41R)</p> |
|--|--|

E. THE CLASSIFICATION OF ISLAMIC FINANCIAL INSTRUMENTS IN THE ACCUMULATION ACCOUNTS AND BALANCE SHEET

1. BACKGROUND

26.53 There are numerous types of Islamic financial arrangements that can be broadly mapped to SNA and BPM financial instruments (please also refer to Annex I). As noted above, lacking a concept of interest earnings, Islamic financial corporations often generate income through arrangements such as the financing of sales or leasing of underlying goods, sometimes including equity financing. These items can generate returns under *Interest and similar returns*, as discussed in Part D. Notably, some of these arrangements may apply to more than one SNA financial instrument depending on variations in the defining characteristics of each contract.

26.54 Several factors need to be considered in the instrument classifications, including:

- What form of institutional unit represented by the recipient of the finance: an equity classification for an instrument will only be possible for an entity that is a corporation;
- Whether or not the financial instrument is designed to provide a profit that has a comparatively high reliability as compared to its magnitude;

- Whether or not the financial instrument is recorded on the balance sheet of the Islamic financial institution;
- Whether or not the investment account holder has a claim on ventures or funds offered by the issuing institution (and hence the entity has institutional unit type behavior);
- Whether or not the investment account holder has a claim on the residual value of the issuing institution;
- Whether or not the lender is the supplier of the goods or services being financed, which would determine a trade credit or loan classification;
- Whether or not the financial instrument provides negotiable securities, for example in the form of participation term certificates.

The discussion below focusses on the classification of individual Islamic financial instruments in the SNA/ESS. It is clarified that the list of Islamic financial instruments discussed below and listed in Annex I is not exhaustive and the compiling agencies can use the factors in the paragraph to classify Islamic financial instruments which are not in the list.

2. ISLAMIC FINANCIAL INSTRUMENTS CLASSIFIED AS CURRENCY AND DEPOSITS (F2)

- 26.55 **Qard, Wadiah, and Amanah** deposits can be withdrawn on demand, at par, without penalty or restriction, and are generally usable for making payments by check, draft, giro order, or other direct payment facilities. These types of deposits are not linked to any profit-making ventures and are not part of the profit and loss sharing schemes. As a result, Islamic financial institutions have the flexibility to use the funds but are required to guarantee the nominal value of the deposits. As a result, these deposits usually offer no returns or, in some cases, very small returns are offered on the basis of gifting (*Hibah*). These instruments may be classified as *Transferable deposits* (F22) or *Other deposits* (F29).
- 26.56 **Qard-Hasan** are another form of return-free deposits, voluntarily placed by depositors to participate in the provision of funds for needy individuals or for social purposes. These may also be provided for specific purposes, as determined by the depositor. In all cases, it is interest-free and is meant to help stabilize cash flows or cater to funding needs that cannot be met using commercial arrangements. These are treated as *Other deposits* (F29).
- 26.57 **Restricted Mudaraba** funds are funds where the investor restricts the manner as to where, how, or for what purpose the funds are invested. No mixing of funds is allowed from other sources to ensure proper management and accountability of the funds. The Islamic financial institution manages the funds either as **Mudarib** (in which the investor is engaged in risk-sharing), or as **Wakil** (i.e., provision of intermediation services for a fixed fee with no participation in the investment results). Only **Restricted Mudaraba** held on-balance sheet should be classified as *Other deposits* (F29).
- 26.58 **Unrestricted Mudaraba** funds are funds where the investor fully authorizes an Islamic financial institution to invest the funds without restrictions as to where, how, or for what purpose the funds should be invested, as long as it is deemed appropriate. The mixing of funds from other sources (including shareholders' funds) is permitted and separate disclosure in the financial statement is therefore required. **Unrestricted Mudaraba** can be divided into three distinct types, two of which are discussed below, while a third type is discussed below under *Shares*.
- **Mudaraba not fixed deposits** are accepted without time frame (not fixed), hence the investors are free to withdraw their money at any time. This type of unrestricted accounts can be considered analogous to saving deposits at a conventional financial institution and should be classified under *Other deposits* (F29).

- **Mudaraba fixed deposits** are accepted for a fixed period that provides an opportunity for Islamic financial institutions to invest in more profitable long-term projects. This type of unrestricted account can be considered as analogous to a time deposit at a conventional financial institution and will usually generate higher returns than for non-fixed period deposits. These are also classified as *Other deposits* (F29).
- 26.59 In the case of **Wakalah deposits**, the bank acts as an agent for investment of depositor's funds in exchange for a fee, usually in the 1.5 to 2 per cent range. Depositors are offered an indicative or nominal return. If the actual return is lower, the depositor only receives this latter return; if the actual return is higher, the bank only pays the indicative return and keeps any excess as an "incentive fee". Because of the possibility of the bank earning this incentive, it will often not charge a fee. These instruments can be classified at *Transferable deposits* (F22) or *Other deposits* (F29).
- 26.60 **Profit and loss sharing certificates** are investors' deposits that resemble shares but do not provide a claim on the residual value of the Islamic financial institution and participation in its governance. The certificates should be classified as *Other deposits* (F29) if non-negotiable.
3. ISLAMIC FINANCIAL INSTRUMENTS CLASSIFIED AS DEBT SECURITIES (F3)
- 26.61 **Mudaraba, fixed with mudaraba certificates** are arrangements accepted for a fixed term, by way of negotiable instruments (called investment deposit certificates or Mudaraba certificates). This type of unrestricted investment has characteristics similar to those of conventional market securities and is typically classified as a *debt security*, if not part the own funds of the financial institution. A separate disclosure of off-balance sheet positions is required to be kept by the Islamic financial institution.
- 26.62 **Sukuk** are investment certificates issued by Islamic financial institutions to obtain funding. **Sukuk** (plural of *Sakk*), are certificates (commonly known as Islamic bonds), with each representing a proportional undivided ownership right in tangible assets, monetary assets, right to use others' assets (*Usufruct*), services, debts, a pool of predominantly tangible assets, or a business venture (such as *Mudaraba* or *Musharaka*). These assets, which must be clearly identifiable, may be in a specific project or investment activity in accordance with Shari'ah rules and principles. **Sukuk** might often be thought of as providing a securitization wrapper around an underlying contractual arrangement. If they involve an intermediate legal structure such as a special purpose entity (SPE), then consideration of whether the SPE should be recognized as an institutional unit may be required, depending on the legal and other specific circumstances. The following three types of sukuk contracts are the most prominent: (i) *Sukuk Ijarah*; (ii) *Sukuk Musharaka*; and (iii) *Sukuk Murabaha*, which are all negotiable instruments, although the last type of arrangement only becomes negotiable when certain conditions are met. Different types of *Sukuk* will have fixed income properties, equity-like properties, or more complex types of arrangements for the returns.
- **Fixed Income Sukuk** are instruments which are normally either sale or lease based. Sale based contracts represent a debt, and therefore may not be bought/sold in the secondary market at other than par value. Lease based contracts such as *Ijarah* do not have secondary market restrictions as the revenue streams are based on a tangible underlying asset. *Ijarah Sukuk* also typically have a redemption payment, representing the return of beneficiary's share in the underlying tangible asset back to the issuer. Examples include: *Murabaha* (sale at mark-up); *Salam* (forward commodity sale); *Istisna'a* (manufacturing sale); and *Ijarah* (lease based).
 - **Variable profile Sukuk or Wakalah Sukuk** represent an agency arrangement in which the *Sukuk* holder delegates responsibility to the issuer to carry out Shari'ah compliant revenue generating activity. The precise nature of this activity can vary, and it can encapsulate other transaction types within it (e.g., *Ijarah*, *Murabaha*, etc.). The aggregate return on the activity may be either fixed or variable, depending on the agreement between the counterparties.

- *Hybrid Sukuk* may vary in form at different points in their life cycle. For example, *Istisna'a* plus *Ijarah Sukuk* may be used by an issuer to raise funds to first construct an asset before leasing it out.
- 26.63 **Profit and loss sharing certificates** are investors' funds that resemble shares but do not provide a claim on the residual value of the Islamic financial institution and participation in its governance. The certificates should be classified as *Debt securities* if they are negotiable.
- 26.64 **Participation term certificates** are long-term investment instruments that entitle the holder to a share of an Islamic financial institution's profit. These certificates should be classified as *Debt securities* if the certificates concern debt liabilities of the institution.
4. ISLAMIC FINANCIAL INSTRUMENTS CLASSIFIED AS LOANS (F4)
- 26.65 **Qard-Hasan financing** is a return-free financing that is made to needy individuals or for some social purpose. This financing is usually extended on a goodwill basis, and the debtor is required to repay only the principal amount of the financing. The debtor may, however, at his or her discretion, pay an extra amount beyond the principal of the financing (without promising it) as a token of appreciation to the creditor.
- 26.66 In a **Murabaha financing** contract, an Islamic financial institution purchases goods upon the request of a client, who usually makes deferred payments to the financial institution that cover costs and an agreed upon return. These contracts resemble collateralized loans within conventional finance, in which the underlying goods, such as properties or automobiles, are registered under the customer's name and are used as collateral. The disclosure of the cost of the underlying goods is required. The financial institution handles payment to the supplier including direct expenses incurred (delivery, insurance, storage, fees for letter of credit, etc.). Operating expenses of the financial institution are not included. This arrangement can be defined as a sale of goods at cost plus profit margin.
- 26.67 **Tawarruq financing (commodity Murabaha)** is a financial instrument in which a buyer purchases a commodity from an Islamic financial institution on a deferred payment basis, and the buyer sells the same commodity to a third party on a spot payment basis. This is an extension of **Murabaha** whereby the financial institution arranges for the sale of the item. The buyer basically borrows the cash needed to make the initial purchase. Later, when cash is secured from the second transaction, the buyer pays the original seller the instalment or lump sum payment he owes (which is cost plus markup).
- 26.68 **Mudaraba financing** constitutes a partnership between an Islamic financial institution and a client in which the institution provides capital (*Rab al-Mal*) and the client provides skillful labor. This financing is a type of partnership whereby skill and money are brought together to conduct business. Profits generated from the business are shared according to the agreement, while losses are borne fully by the capital provider, except when losses are due to misconduct, negligence, or violation of the agreed conditions by the client. Although this arrangement has features of equity, it has a fixed-term nature and therefore represents a fixed-term claim on the client rather than a claim on any residual value.
- 26.69 **Musharaka** represents a partnership between an Islamic financial institution and an enterprise in which both parties contribute to the capital (*Rab al-Mal*) of partnership. The financial institution and client agree to share any profits generated from the venture according to the pre-agreed ratio, with any losses shared according to the ratio of contribution. This type of financing can be structured as a *loan* where the financial institution provides financing in the form of working capital to an entity but does not have a claim on the residual value of the debtor enterprise.
- 26.70 **Mushtarakah** is a combination of both **Musharaka** and **Mudaraba**. It can be treated as *loans* if there is no residual claim on the value of the debtor entity.

- 26.71 **Bai Muajjal** is a type of financing provided by an Islamic financial institution to its client by supplying desired commodities or services with deferred payments. This contract is classified as *loans* if the supplied commodities or services are from third parties.
- 26.72 **Bai Salam** is a short-term financing agreement in which an Islamic financial institution makes full prepayments (spot payment) for future (deferred) delivery of a specified quantity of goods on a specified date. The financial institution and a supplier may engage in such a contract, in which the supplier agrees to sell their product prior to the goods being delivered. Generally, the agreed spot price is less than the future price of the goods, which ensures a return to the financial institution. This arrangement should be classified as *loans*, only if the goods or services produced are not for the financial institution's own use.
- 26.73 **Istisna'a financing** is a partnership between an Islamic financial institution and an enterprise, usually manufacturer or construction company, whereby the financial institution places an order and provides financing to the enterprise to manufacture/construct and or supply certain goods or buildings. Upon or before the delivery of the order, the financial institution usually enters into a contract with another party (the ultimate purchaser) at a price higher than the original contract of the **Istisna'a**, thus generating profits. These arrangements are classified as *Loans*, if the produced goods or constructed buildings are for the use of the ultimate purchaser. **Ju'alah** is an **Istisna'a** contract applicable for services as opposed to a manufactured good. It may be a *Loan* if the services are not for the financial institution.
- 26.74 **Bai bil wafa or Bai bil-istighlal** are sales (ba'i) in which the seller has the right, as stipulated in the contract, to repurchase the underlying property (real estate) from the buyer by refunding the purchase price. The right of redemption is given to the original seller upon an understanding that the buyer will give (i.e., resell) the property back to the seller and receive the original price. The buyer agrees to honor that understanding and hence the name *Wafa* which means to honor.
- 26.75 An **Ijarah** is a contract in which an Islamic financial institution purchases capital equipment or property and leases it to an enterprise. The financial institution may either rent out the equipment (simple Ijarah) or receive a share of the profits earned through its use. There are two types of more sophisticated Ijarah.
- **Ijarah Muntahia Bittamleek (Ijarah MBT)** is a hybrid instrument and can be arranged as a pure operating lease or as a lease-to-own arrangement.
 - In the case of the pure operating lease version of **Ijarah MBT**, the title for the underlying asset is not transferred to the client (lessee), and ownership risks of the assets are borne by the Islamic financial institution (usually through a separate unit that it owns). Operating ijarah should be treated in the same way as a conventional operating lease (rental agreement for some non-significant portion of the asset's economic life) and does not give rise to a financial instrument. It is discussed only to distinguish it from ijarah MBT and Ijarah Wa-Iktina below.

In the case of the **Ijarah MBT** lease to own arrangement (or financing Ijarah), the title for the underlying asset may be transferred to the lessee over the term of the lease or at the end of the lease arrangement. This makes it resemble a conventional financial lease in some ways, however the risks and rewards incidental to ownership remain with the lessor throughout the lease term until the asset is transferred to the lessee. To this end, there can be both a lease contract and a transfer of ownership contract involved. This arrangement generally constitutes a long-term lease, and the lessee could be considered the economic owner (but not the legal owner) for purposes of the economic accounts. This form of Ijarah should be classified as *Loans* over the period of the lease.

- **Ijarah Wa-iktina** is the financing of an acquisition of an underlying asset under a lease-to-purchase arrangement, and it involves two stages. The first stage is the lease of underlying asset over the lease period, which covers the majority of the asset's economic life, and for which the lessee is effectively considered the economic owner (but not the legal owner) in the economic accounts. The second stage is the transfer of ownership of the residual value of the asset at the end of the lease period. This arrangement, which is similar to a conventional financial lease, should be classified as *Loans* over the period of the lease.

5. ISLAMIC FINANCIAL INSTRUMENTS CLASSIFIED AS EQUITY AND INVESTMENT FUND SHARES (F5)
- 26.76 As noted above, a **Mudaraba contract** is a partnership of the Islamic financial institution and the client. **Restricted Mudaraba** that are held off-balance sheet should be classified as *Shares* (equity) if considered part of the own funds of the financial institution. A separate disclosure of off-balance sheet positions is required to be kept by the Islamic financial institution. **Mudaraba fixed with Mudaraba certificates** constitutes **unrestricted Mudaraba** arranged through negotiable instruments with characteristics similar to those of conventional market securities. and it is classified as *Shares* if considered part of the own funds.
- 26.77 **Participation term certificates** are long-term investment instruments that entitle the holder to a share of a corporation's profit. These certificates are treated as *Shares* if considered as part of the own funds.
- 26.78 As noted above, **Sukuk instruments** constitute investment certificates issued by Islamic financial institutions to obtain funding. These should be classified as *Shares*, only in the instance where the owner of the security has a claim on the residual value of the issuing entity. **Equity-like sukuk** are instruments normally based on some sort of partnership arrangement, with the risk/ reward sharing ratio agreed ex ante. In these contracts, it is impermissible for one party to provide a guaranteed fixed payment (either in terms of periodic return or maturity payment) to the other. **Mudaraba sukuk** can resemble **Wakalah** in terms of cashflows, but the contractual relationship between parties will differ. Examples of these arrangements include: **Musharaka** (pure partnership), and **Mudaraba** (silent partnership or 'Commenda').
- 26.79 **Musharaka** constitutes a partnership between an Islamic financial institution and an enterprise in which both parties contribute to the capital (*Rab al-mal*) of partnership. In this type of arrangement, the financial institution and client agree to share any profits generated from the venture according to the pre-agreed ratio; a loss is shared according to the ratio of contribution. This type of financing is classified as *Shares* when the financial institution acquires a claim on the residual value of the enterprise.
- 26.80 **Mushtarakah** is a combination of both **Musharaka** and **Mudaraba**. It can be treated as *Shares* if there is a residual claim on the value of the debtor entity.
6. ISLAMIC FINANCIAL ARRANGEMENTS IDENTIFIED AS INSURANCE RELATED FINANCIAL INSTRUMENTS (F6)
- 26.81 The **Mudaraba Takaful model** is based on the Islamic financial instrument known as **Mudaraba** that relies on profit sharing principle. In this model, the Takaful operator is the entrepreneur (*Mudarib*) providing management skills or labour. The operator is appointed by the participants, who act as investors or fund contributors (*Rab al-mal*). Any surplus or profit resulting from takaful fund investments are shared between the takaful operator and takaful fund according to a pre-agreed ratio, while the possible losses are borne only by the takaful fund unless there is element of negligence from the takaful operator.
- 26.82 The **Wakalah Takaful model** is based on the Islamic financial instrument known as **Wakalah** – a contract between the takaful participants and the **Takaful operator** that acts as an agent (*Wakil*). Any surplus realized from the investment of the participants' funds will go to the participants only, as the takaful operator is entitled to an agency fee for the services rendered on mutual agreement and the predetermined terms in the contract. The profit and the losses derived from the operations of **Takaful fund** and the investments belong to takaful fund only.
- 26.83 **Hybrid Takaful** is an Islamic insurance contract that is structured to combine more than one financial instrument.

- The *Wakalah-Mudaraba* model combines the features of two models. According to this hybrid model, the participants and the **Takaful operator** sign two contracts: As per the *Wakalah* contract, the operator is entitled to a fee from the contributions paid by the participants; and as per the *Mudaraba* contract the operator is entitled to the predetermined share of profit gained from the investments of the takaful fund.
- Another hybrid model is *Waqf-Wakalah-Mudaraba* that integrates elements of the charitable endowment *Waqf* in the above arrangement, where no party gets the underwriting surplus so that the original contributions remain in the common pool for the purpose of reinvestment and to enhance sustainability.

7. ISLAMIC FINANCIAL INSTRUMENTS CLASSIFIED AS FINANCIAL DERIVATIVES (F7)

- 26.84 Financial derivatives have a prominent role in conventional finance, but less so in Islamic finance. The prohibition of gambling and excessive uncertainty/risk as well as short sales or financing activities, significantly limit the use of derivative contracts in this environment. Moreover, although certain types of forward sales are permitted, these are not necessarily considered derivative contracts.
- 26.85 That said, derivative contracts whose sole purpose is hedging (that is, to minimize any risk exposures) do not seem to be incompatible with Shari'ah principles. Therefore, Islamic financial institutions may enter into derivative contracts purely for hedging purposes (regardless of what the counterparty's objective might be), and this is the case in some countries. However, the use of financial derivative types, remains a somewhat open-ended issue in Islamic finance in terms of a general treatment that can apply across economies. As a result, their use varies across jurisdictions, depending upon the domestic Shari'ah regulators and legislation.

8. ISLAMIC FINANCIAL INSTRUMENTS CLASSIFIED AS OTHER ACCOUNTS PAYABLE/RECEIVABLE (F8)

- 26.86 *Istijrar* refers to an agreement where the buyer purchases commodities under a single agreement from a supplier from time to time in different quantities. The deal is considered as a sole agreement when all terms and conditions are finalized.
- 26.87 *Istisna'a financing* relates to goods or buildings for the Islamic financial institution's own use and should be classified as trade credit and advances. A **Ju'alah** contract is essentially an *Istisna'a* that applies to services as opposed to a manufactured good.
- 26.88 *Bai Muajjal financing* (discussed in paragraph 26.70) is classified as trade credit if it is a direct extension of credit by the supplier.
- 26.89 If the associated goods or services in *Bai Salam financing* (discussed in paragraph 26.71) are for use by the Islamic financial institution (lender), the arrangement would be considered trade credit.

9. ISLAMIC FINANCIAL INSTRUMENTS AND RELATED INVESTMENT INCOME UNDER THE FUNCTIONAL CLASSIFICATION OF BPM7

- 26.90 This section follows the classification of Islamic instruments discussed above but extends it to account for the functional classification used in the external sector statistics. The classification of equity and debt security like instruments to functional categories follows the principles from Chapter 6, *BPM7*.
- 26.91 *Qard*, *Wadiah*, and *Amanah deposits* are included in the broad category **other investment** under currency and deposits, specifically, *Transferable* or *other deposits* (F22 or F29). Related income would be reflected under investment income, again under other investment as *Interest and similar returns*. A similar treatment is to be applied for *Quard-Hassan deposits*, under *Other deposits*,

although in this case investment income is not relevant.

- ~~26.92~~ **Restricted Mudaraba funds** are included in the broad category **other investment** under currency and deposits, specifically, *Other deposits*, or as **portfolio investment Equity**, depending on whether the funds are held on-balance sheet or off balance sheet. **Unrestricted Mudaraba** funds are classified under *Other deposits* for both for both fixed term and non-fixed term arrangements. However, fixed arrangements with **Mudaraba certificates**, should be classified as either *debt* (F3) or *equity* (F5) under **portfolio investment**, while the corresponding investment income is to be recorded as *Interest and similar returns* or *Dividends*. **Participation term certificates** follow the exact same treatment as fixed mudaraba with certificates. **Profit and loss sharing certificates** are included as *Other deposits* (F29) under other investment if not negotiable or *Debt securities* (F3) under portfolio investment if negotiable, with income as *Interest and similar returns* recorded under other investment or portfolio investment.
- 26.93 **Sukuk** can take the form of a debt security (F3) or an equity security (F5) under portfolio investment with investment income recorded as interest and similar returns or dividends. **Fixed – income sukuk** constitutes a *Debt security under portfolio investment*. **Equity-like sukuk** is to be recorded, as the name suggests, under **portfolio investment equity security**. **Variable profile sukuk** can be treated as debt or equity security under portfolio investment, depending on the precise nature of the arrangement. Correspondingly, income on the above instruments can be under **portfolio investment** as *Interest and similar returns* (from securities) or *dividends* (from equity securities).
- 26.94 **Quard-hasan financing** is to be classified under **other investment** as a loan (F4). **Murahaba financing** also constitutes *Loans*. **Mudaraba financing, tawarruq** (commodity murabaha) as well as **bai bil wafa** and **bai bil istighlal** are all treated as *loans* (F4) in **other investment**. **Bai Muajjal, Bai Salam, Ju'ala, and Istisna'a financing** is to be classified as either *loans* or *trade credits and advances*, the latter only when the commodities are used by an Islamic financial institution. In cases where an optional or required return is paid on these instruments, the investment income is classified as **other investment** as *Interest and similar returns*.
- 26.95 **Ijarah Wa-iktina** (akin to a financial lease) or **Ijarah MBT** (financing ijarah) is classified as *Loans* under other investment and the investment income is recorded under **other investment Interest and similar returns**. It should be noted that **simple Ijarah** or **Ijarah Muntahia MBT** in the case of operating ijarah (operating lease) do not give rise to entries in the financial account. Rather, these are treated as *Operating leasing services* in the services account.
- 26.96 **Musharaka** and **Mushtarakah** are classified as either *loans* (F4) or *equity* (F5), with the corresponding income flows to be recorded as *Interest and similar returns* or *Dividends*.

F. ECONOMIC OWNERSHIP OF NON-FINANCIAL ASSETS UNDER ISLAMIC FINANCIAL ARRANGEMENTS

1. SPECIAL CONSIDERATIONS IN ISLAMIC FINANCE AND THE REGULATORY FRAMEWORK
- 26.97 The SNA and BPM make a clear distinction between legal ownership and economic ownership. The legal owner of assets or products is the institutional unit entitled by law to claim benefits associated with those items. The legal owner may transfer (through a contract) the risks and rewards related to the use of the relevant assets to another economic agent. This other agent then becomes the economic owner and is the institutional unit entitled to claim the benefits, or rewards, associated with the use of the assets over the course of an economic activity by virtue of accepting the economic risks over the relevant period. Usually, the legal owner coincides with the economic owner but, when this is not the case, the relevant assets are allocated to the sector of the economic owner. This distinction is also relevant for Islamic finance in national accounting and external sector statistics, though Islamic accounting standards may suggest otherwise.
- 26.98 Islamic finance accounting standards recommend recording the ownership of the underlying non-financial assets in the balance sheets of the Islamic financial institutions (or institutional units who may be lessors). This is the case, even though they may not actually use the assets in their

productive activities, or they may hold them only briefly. In other words, the focus in the accounting standards is on legal ownership. Consequently, one interpretation of the financial statements of Islamic financial institutions suggests that they are comparatively more involved in (and more exposed to) non-financial activities than is perhaps the case. Of course, this interpretation also ignores the issue of economic ownership.

- 26.99 Another interpretation, arguably more consistent with shared relationships in principles of Islamic finance as well as the related guidance for conventional finance, is that the economic ownership rests with the users of the assets. Therefore, the user of the non-financial asset can be determined to be the economic owner in most cases. Thus, there is a need to account (in a macroeconomic statistical sense) for the role of Islamic financial institutions and instruments under these arrangements as well as the nature of their economic activities under certain arrangements. This provides a means to determine the economic ownership, or changes in economic ownership, of the relevant assets.
- 26.100 With respect to the treatment of economic ownership in financing arrangements, it is useful to consider the following two complicating points. First, Islamic financial institutions (banks in particular) undertake various economic activities and may set up separate entities to facilitate these activities, either consolidated in their financial statements or unconsolidated (as separate wholly owned institutional units). Therefore, in some of these arrangements, it is possible that Islamic financial institutions have established separate institutional units (which could be non-financial entities), often in partnership with other entities, which will then be the legal and economic owner of the underlying assets. One example is real estate investment whereby Islamic financial institutions can co-invest in a venture with other units (say, a construction firm) to develop properties which the financial institution's subsidiary temporarily owns (at least until they are sold to the final user). If so, this does not change the arrangement materially. Second, regardless of whether a separate institutional unit is set up, Islamic financial institutions can sometimes act as facilitators by transferring the economic ownership of the items from the seller to the client (the participant with the need to make use of these assets) which would take on financial risk in the process. This possibility does change the arrangement and does allocate economic ownership at the outset. In both cases, not recording the economic ownership of the underlying assets in the balance sheets of Islamic financial institutions (or their wholly owned subsidiaries) helps to better articulate their role as providers of financial services that facilitate the transfer of non-financial assets or products. Besides, the often-brief ownership of such items by Islamic financial institutions could be considered as a form of constructive possession (*Qabd Hukmi*) or physical possession (*Qabd Fe'eli*) and should not be considered as economic ownership.

2. ECONOMIC OWNERSHIP UNDER DIFFERENT TYPES OF ISLAMIC FINANCIAL ARRANGEMENTS

Background

- 26.101 This section focuses on the ownership of non-financial assets related to sales, leasing, pure lending and equity financing and its treatment in Islamic finance accounting frameworks. It also touches on other similar Islamic financing arrangements which are typically based on trading models or profit and loss sharing models involving underlying non-financial assets or products. This section invariably relies heavily on the above discussion of financial instruments in Section E.
- 26.102 The ultimate purchasers of the underlying non-financial assets are considered as the economic owner of the assets obtained through Islamic financial institutions' arrangements. The economic owners claim the benefits and assume the risks associated with their use. The time of the acquisition of the underlying items is assumed to be the time at which the economic ownership changes hands. When a change of ownership is not obvious, the time at which the assets enter into the books of the transaction partners may be a good indication and, failing that, the moment when physical possession and control is acquired.

Economic ownership structures

- 26.103 A convenient way to group transactions and positions in Islamic financing instruments is an aggregation by term as well as by characteristics and purpose. From that perspective, economic ownership for the different arrangements can be better assessed. The discussion below is not deemed to be exhaustive but provides a general assessment on the issue of economic ownership.

Shorter-term financing

- 26.104 Where the financial institution acquires goods or services for its own use, then it is the economic and legal owner of these products. However, it is more relevant to focus on shorter-term financing related to sales of goods and services where the purchaser/user is the owner, or at least the economic owner, early in the arrangement. In these cases, the Islamic financial institution has only a financial claim on the borrower, especially where the products are of relatively low value. Different treatment may apply, depending on the characteristics of the financial arrangement.
- 26.105 Sometimes, the financial institution takes legal ownership of products for a very short period (e.g., **Murabaha**), before selling it. However, the intent of most of these financial arrangements usually is the facilitation of a purchase by the client and ultimate user. When the products are sold, the final user is the legal and economic owner, while the financial institution will have a claim on the client for the amount financed.
- 26.106 In other arrangements, the Islamic financial institution holds the products for a period of time. Take the example of a spot purchase of goods for a future sale, sometimes at a higher price (e.g., **Bai Salam**). While the financial institution may become the legal and economic owner for that period only, for economic accounting purposes, the purchasers/users are considered the economic owners (in the case of a loan) of the products since they ultimately claim the benefits and assume the risks associated with their use (see paragraph 26.71). When the goods are subsequently acquired by the users, then they will become the legal and economic owners. Another example is with a Bai bil Wafa / Bai bil-Istigal contract with the financial institution purchaser pledges to sell it back to the client at a fixed future date, which makes the purchaser the legal and economic owner for a (typically short) period of time.
- 26.107 A last arrangement to consider is an operating lease (simple **ljarah**) which is a rental agreement for a period that does not cover a significant portion of the non-financial asset's economic life (see paragraph 26.73). The lessee must return the item at the end of the lease term and does not have an option to purchase. The lessor, in this case the Islamic financial institution, is both the legal and economic owner of the asset (usually through a separate unit that it owns), as it assumes the risks and rewards related to the ownership of the asset.

Longer-term financing

- 26.108 Substantive issues with respect to economic ownership of a financed non-financial asset arise in the case of the acquisition of relatively high value goods, construction, or project finance over an extended period of time. That financing can be in the form of **Loans**, such as with **Istisna'a**. One can distinguish a period of time where the Islamic financial institution makes progress payments to the contractor. In this period, the financial institution is the legal and economic owner of the asset. However, for economic accounting purposes, the customers who request the construction or manufacturing of the said non-financial asset are considered the economic owners of the products since they ultimately claim the benefits and assume the risks associated with their use. Nevertheless, the financial institution holds a claim on the asset until the debt is extinguished.
- 26.109 Other types of longer-term financing arrangement are **Mudaraba financing** and **Musharaka** partnerships. In both instances the Islamic financial institution only provides funding, though it may

share in the profits (**Musharaka**). Any underlying non-financial assets are economically owned by the party that uses those assets, even though the financial institution can remain the legal owner for the duration of the financing agreement.

26.110 Financial leases (**Ijara Wa-iktina**) constitute another form of longer-term financing where economic ownership is clear. The lease term typically covers a substantive portion of the economic life of the assets, and the lessee has the option of purchase at the end of the lease period. The instrument is treated as a *loan*. The lessee is, for economic accounting purposes, considered the economic owner. The financial lease also provides a return for the lessor, i.e., the Islamic financial institution, to compensate it for providing the financial means to acquire the asset. The lessor is also entitled to the residual value of the leased asset at the end of the lease term, either as payment for the purchase of the depreciated asset by the lessee, or by getting economic ownership of the depreciated asset.

3. ECONOMIC OWNERSHIP OF NON-FINANCIAL ASSETS IN THE CASE OF A CLIENT'S DEFAULT

26.111 For items acquired for use by a financing contract, defaulting on the corresponding payments is an issue that may arise in Islamic finance. Given Shari'ah principles' social benefit aspects incorporated in Islamic finance, it stands to reason that, in several cases, economic ownership is unaffected when the economic owners of non-financial assets default on their payments in financing arrangements such as **Murabaha** and **Istisn'a**. It can be argued that the default only relates to the financial payment, not to the full arrangement itself. Any contract with profit sharing or participation cannot be considered in full default, so the user would remain the economic owner. Therefore, it can be assumed that defaulting clients will remain the economic owners, but there are likely some non-mutually exclusive and complicating considerations.

26.112 It is possible, however, that default actually leads to a change in economic ownership. If, for example, the Islamic financial institution determines that the borrower did not enter into a contract in good faith, then the institution (subject to the clauses of the contract) could repossess the assets and temporarily becomes the economic owner as well as the legal owner, while the borrower could face a penalty. Also, in the case of a shortage of a particular asset (e.g., dwellings), or in the case of neglect of the maintenance of the asset, the financial institution may be able to find a more worthy or needy client. A further consideration might relate to the nature of the default. For example, it could be the case that circumstances indicate that the non-performing loan is a write-off, and the borrower is not expected to ever be able to repay. In this case, a change of economic ownership may be warranted. In other words, it may all depend on the details of the situation, in addition to the type of financing and the actual use of the commodity (e.g., a community building versus a business asset).

26.113 Lastly, and more specifically, for financial leases or **Ijara Wa-iktina** the situation might be clearer. It is likely that in some or many of these instances the lessor will seek to find another lessee.

ANNEX: CLASSIFICATION OF ISLAMIC FINANCIAL INSTRUMENTS AND INCOME

| Instrument | National Accounts | External Sector Statistics |
|--|--|--|
| Qard, Wadiah, and Amanah | FA: Transferable deposits (F22) or Other deposits (F29) Income: Interest and similar returns (D41) | FA/IIP: Other investment: Currency and deposits: Transferable deposits or other deposits Income: Primary income: Investment income: Other investment: Interest and similar returns |
| Qard-hasan | FA: Other deposits (F29) Income: Interest and similar returns (D41) | FA/IIP: Other investment: Currency and deposits: Other deposits Income: N/A |
| Restricted Mudaraba funds | FA: Other deposits (F29) or Equity (F51) Income: Interest and similar returns (D41) or dividends (D421) | FA/IIP: Other investment: Currency and deposits: Other deposits or Portfolio investment: Equity Income: Primary income: Investment income: Other investment: Interest and similar returns (D41O) or Portfolio investment: Dividends |
| Mudaraba – fixed Mudaraba - not fixed | FA: Other deposits (F29) Income: Interest and similar returns (D41) | FA/IIP: Other investment: Currency and deposits: Other deposits Income: Primary income: Investment income: Other investment: Interest and similar returns |
| Mudaraba – fixed with mudaraba certificates | FA: Debt security (F3) or Equity security (F5) Income: Interest and similar returns (D41) or dividends (D421) | FA/IIP: Portfolio investment – Debt or Equity security Income: Primary income: Portfolio investment: Debt or equity securities: Interest and similar returns (D41O) or dividends (D42P) |
| Participation term certificates Sukuk (generally) | FA: Debt security (F3) or Equity security (F5) Income: Interest and similar returns (D41) or dividends (D421) | FA/IIP: Portfolio investment – Debt or Equity security |

| Instrument | National Accounts | External Sector Statistics |
|---|--|--|
| Sukuk (Variable profile) | | Income: Primary income: Portfolio investment: Debt or equity securities: Interest and similar returns (D41P) or dividends (D42P) |
| Sukuk (Equity-like) | FA: Equity security (F5) Income: Dividends (D421) | FA/IIP: Portfolio investment – Equity security Income: Primary income: Portfolio investment: Equity securities: Dividends (D42P) |
| Sukuk (fixed-income) | FA: Debt security (F3) Income: Interest and similar returns (D41) | FA/IIP: Portfolio investment – Debt security Income: Primary income: Portfolio investment: Interest and similar returns |
| Wakalah deposits | FA: Transferable deposits (F22) or Other deposits (F29) Income: Interest and similar returns (D41) | FA/IIP: Other investment: Currency and deposits: Transferable deposits or other deposits Income: Primary income: Investment income: Other investment: Interest and similar returns (D41O) |
| Murabaha financing Qard-hasan | FA: Loans (F4) Income: Interest and similar returns (D41) | FA/IIP: Other investment: Loans Income: Primary income: Investment income: Other investment: Interest and similar returns (D41O) |
| Istisna'a financing Bai Salam Bai Muajjal | FA: Loan (F4) or Trade credits and advances (F81) Income: Interest and similar returns (D41) | FA/IIP: Other investment: Loans Or Other investment: Trade credit and advances Income: Primary income: Investment income: Other investment: Interest and similar returns |
| Ijarah | Operating Ijarah: Production account: market output (P11) Financing Ijarah FA – Loans (F4) Income – Interest and similar returns (D41) | Operating Ijarah CA: Trade in Services: Other business services Financing Ijarah FA/IIP: Other investment: Loans Income: Primary income: Investment income: Other investment: Interest and similar returns (D41O) |

| Instrument | National Accounts | External Sector Statistics |
|--|---|---|
| Musharaka | FA: Loan (F4) or equity (F5) Income: Interest and similar returns (D41) or dividends (D421) | FA/IIP: Other investment – Loans Or Portfolio investment – Equity security Income: Primary income: Investment income: Other investment: Interest and similar returns (D41O) Or Income: Primary income: Portfolio investment: Equity securities: Dividends (D42P) |
| Mudaraba Financing Tawarruq Bai bil Wafa Bai bil-Istighlal | FA: Loan (F4) Income: Interest and similar returns | FA/IIP: Other investment – Loans Income: Primary income: Investment income: Other investment: Interest and similar returns |
| Ju'alah | FA: Loan (F4) or Trade credits and advances (F81) Income: Interest and similar returns (D41) | FA/IIP: Other investment: Loans Or Other investment: Trade credit and advances Income: Primary income: Investment income: Other investment: Interest and similar returns |
| Mushtarakah | FA: Loan (F4) or equity (F5) Income: Interest and similar returns (D41) or dividends (D421) | FA/IIP: Other investment – Loans Or Portfolio investment – Equity security Income: Primary income: Investment income: Other investment: Interest and similar returns Or Income: Primary income: Portfolio investment: Equity securities: Dividends |
| Istijrar | FA: Trade credits and advances (F81) Income: Interest and similar returns (D41) | FA/IIP: Other investment – Trade credit and advances Income: Primary income: Investment income: Other investment: Interest and similar returns (D41O) |

Chapter 18. Informal Economy

(New SNA/BPM Chapter)

Chapter 39: (2025 SNA)/Chapter 18 (BPM7) Informal economy (moved downwards, revised title)

(OLD Chapter 25: Informal aspects of the economy)

**[Sections or paragraphs marked (*) are SNA-only text and excluded from BPM7;
Sections or paragraphs marked (x) are BPM7-only text and excluded from SNA]**

A. INTRODUCTION

- 39.1 The informal economy provides employment and income to many people who might otherwise be unemployed. Informal workers and enterprises tend to be vulnerable to negative economic shocks, which has consequences for inequality and poverty. Measuring the informal economy is important for designing, implementing, monitoring and analyzing macroeconomic and social policies. The measurement framework for the informal economy aims to ensure consistent measures of informal production and informal labour inputs. Data compiled according to this framework are designed to inform policy decisions that may decrease the vulnerability of informal workers and enterprises, especially in developing economies.
- 39.2 The informal economy refers to the productive activities carried out by persons or economic units that are not covered by formal arrangements established by regulations and laws, such as registration, regulation, payment of taxes, and coverage of workers by social security and other labour laws and regulations. The informal economy includes all informal productive activities carried within the general production boundary. Compiling statistics on the informal economy makes it possible to assess how far the benefits of development reach to people who are not counted by the statistics that are based on official registration or compliance with tax laws. Despite the difficulty of doing so, attempts must be made to identify and measure the informal economy. Each country should aim to develop its system of statistics on the informal economy in order to provide an adequate information base for a wide range of descriptive and analytical purposes, including for (a) describing and enhancing understanding of the informal economy and (b) supporting the development of policies addressing the informal economy, while taking account of specific national needs and circumstances.
- 39.3 The International Labour Organization (ILO) in its Resolution Concerning Statistics on the Informal Economy, (International Labour Office, 2023) adopted by the 21st International Conference of

Labour Statisticians (ICLS) established the standards for statistics on the informal economy. Whilst there is commonality between the concepts and definitions in the ILO standards and those in the System of National Accounts (SNA) and the Balance of Payments and International Investment Position Manual (BPM), the meaning of these concepts and definitions is sometimes different from those used in the SNA and BPM. For example, the [BPM/SNA] includes illegal or illicit activities in the production boundary, whereas the ILO standards exclude them from the informal economy. This chapter summarizes the ILO standards, giving emphasis to the concepts, definitions and classifications used in the ILO standards and explaining their relationship with the [SNA/BPM].

- 39.4 It is a common misconception that GDP is underestimated because it does not include the production of informal businesses and informal labour inputs. Conceptually the SNA includes all productive activities irrespective of whether these activities are formal or informal. The compilation of exhaustive measures in the presence of informality is certainly challenging, but as discussed in SNA paragraphs 7.47 to 7.56, compilers should always endeavor to make efforts to use data sources and estimation methods that cover non-observed activities. The framework for the informal economy described in this chapter does not focus on developing exhaustive measurements of production, but rather on providing a complete presentation of the informal economy.
- 39.5 The non-observed economy, including non-observed cross border trade in goods and services, is conceptually distinct and different from the informal economy. The non-observed economy includes activities that, for various reasons, are not captured in regular statistical enquiries. It is a pragmatic term that is used in the context of achieving exhaustive statistics and includes misreporting by formal units such as large corporations. Efforts to cover the non-observed economy ensure that all productive activities are covered in statistical estimates even if not covered by statistical enquiries. Because informal activities tend to be difficult to measure and are sometimes omitted from statistical surveys or administrative data sources, there tend to be certain overlaps between the informal economy and the non-observed economy. Nevertheless, the concepts serve different purposes, and each includes elements that are not included in the other. The primary focus of this chapter is on the informal economy, but Section F discusses the non-observed economy in its relation to the informal economy.

1. THE POLICY INTEREST IN MEASURING INFORMAL ACTIVITIES

- 39.6 Interest in the informal economy continues to attract considerable attention. Informal productive activities are often associated with lower and uncertain income for workers since informal workers and enterprises are less protected against negative economic shocks. This may have broader consequences for inequality and poverty since informality is correlated with vulnerability through the denial of rights at work, the absence of sufficient opportunities for quality employment, and the lack of effective social protection. The quantification of the informal economy and data on its characteristics are needed to enhance the international comparability of statistics on the informal economy, the measurement of decent work and the well-being of households and society in general, and in identifying the main drivers of informality. Analysing macro-economic and social policies on the informal economy facilitates the transition from the informal economy to formal productive activities and to the achievement of gender equality, sustainable development and social justice.
- 39.7 It should be noted that the relevance of statistics on the informal economy in a given country will depend on the nature of its society, labour markets and regulations as well as user needs, and that their implementation will therefore, to a certain extent, be determined by national circumstances.

2. STRUCTURE OF THE CHAPTER

- 39.8 Sections B and C present a summary of the framework of the 21st ICLS *Resolution Concerning Statistics on the Informal Economy*. Section B looks at statistics on economic units and production in the informal economy, clarifies the use of existing terminology, and provides the definitions of the informal economy and the classifications used to identify and analyze informal productive activities.

Section C focusses on informal work arrangements. Sections B and C also discuss the relationships between informal economy statistics and the [SNA/BPM7]. Informal aspects of two issues that are of special importance to the [national accounts/balance of payments], i.e., digitalization and informal cross-border flows, are discussed in Section D. Section E summarizes the data sources and the presentation of indicators for the informal economy. The relationship between the non-observed economy and the informal sector is presented in Section F. The interest in the informal economy has led to the production of several handbooks and studies of current practices. Reporting these in depth is beyond the scope of this chapter, but section G gives a brief description of the main available guidelines and indicates where they may be consulted.

B. FRAMEWORK FOR THE INFORMAL ECONOMY

- 39.9 The standards adopted by the 21st ICLS for statistics on the informal economy are designed to guide countries in measuring informal productive activities of workers and economic units. The standards provide a conceptual framework for statistics on the informal economy, definitions of distinct subsets of economic units depending on their status of (in)formality and the intended destination of their production, a set of definitions of distinct subsets of informal work, a set of indicators to provide information on the characteristics, circumstances and needs of workers and economic units, and operational concepts, definitions and guidelines for the compilation of statistics on the informal economy. In designing the framework for statistics on the informal economy, care was taken to maintain coherence with other international statistical standards, particularly regarding the SNA and the BPM. [(x) SNA sentence: The next section explains the relationship between the terminology used in the 21st ICLS resolution and the familiar SNA terminology.] [(*) BPM7 sentence: More detail on the relationship between the terminology used in the 21st ICLS resolution and the SNA and BPM terminology is given in 2025 SNA, chapter 39, section B.1, Clarifying the use of familiar terminology.]

1. CLARIFYING THE USE OF FAMILIAR TERMINOLOGY (*)

[REMINDER: THE '(*)' DENOTES SNA-ONLY TEXT THAT IS EXCLUDED FROM BPM7]

- 39.10 The statistics on the informal economy compiled according to the 21st ICLS standards are aligned with the SNA, while using different terminologies from the SNA and BPM for some concepts and classifications to allow the statistics to highlight certain features of informality. The different uses of terms are presented below.

Productive activities of economic units

- 39.11 In both the ICLS standards and SNA, the concept of productive activities of economic units includes processes or activities that are carried out under the control and responsibility of an economic unit, using inputs of labour, capital, goods and services to produce outputs of goods or services. Similarly, for the concept of “economic unit” the definition used in the statistics on the informal economy is aligned with that used in the SNA.

Productive activities of persons

- 39.12 The concept of productive activities of persons in the statistics on the informal economy includes work and labour activities within the SNA production boundary as well as activities outside the SNA production boundary although inside the general production boundary.

Sector

- 39.13 The term “sector” used in the 21st ICLS *Resolution Concerning Statistics on the Informal Economy* does not have the same basis as the usual use of the word sector throughout the SNA. In the SNA, sectors are made up of complete institutional units; in the context of the informal economy only the productive activities are considered and other activities of the unit such as consumption and accumulation are excluded. In addition, the criteria used to identify the sectors in the statistics on the informal economy are based on the intended destination of the production and the formal status of the economic unit. Thus, for example, households having no productive activity are simply not considered in the steps to identify those unincorporated enterprises operated by households that are to be included in the informal economy.

Enterprise

- 39.14 In the SNA, a corporation represents a single enterprise, but each enterprise may consist of a number of establishments. A key difference between an enterprise and an establishment is that a full set of accounts must exist, or could be constructed, for an enterprise, but for an establishment a much more restricted set of data is available, typically only information relating to production, number of employees and the capital formation associated with the activity.
- 39.15 Within a household many different types of production activities may take place. A complete set of accounts does not exist for individual activities that are not activities of quasi-corporations, nor for the total of all household activities. The SNA usage of “unincorporated enterprise” is taken to mean the totality of all unincorporated activity undertaken by a household even though in a supply and use table, for example, this may be partitioned by types of activity and be grouped with establishments of corporations undertaking the same activity.
- 39.16 The use of unincorporated enterprise in the 21st ICLS *Resolution Concerning Statistics on the Informal Economy* does not correspond to the sum of unincorporated activity of a household but to each activity separately. In SNA terms, the unincorporated enterprise is broken down into a number of unincorporated establishments, some of which may be included in the informal economy and some excluded, even for the same household. For example, if one member of a household operates an unincorporated repair business and another member of the same household operates an unincorporated childcare business, they would be treated as separate unincorporated establishments in the informal economy statistics. Furthermore, the informal economy statistics identify individual members of a household as owning and operating each establishment/enterprise and capable of employing workers. In the SNA, it is the household collectively that is responsible for all activity and for employing workers.

Subsectoring production

- 39.17 The SNA subdivides production into market production, production for own final use and non-market production. Non-market production is not at issue here since it is never undertaken by households. However, to meet the 21st ICLS resolution it is necessary to subdivide production by households into production that is mainly for sale or barter and production that is mainly for own final use. In the case of unincorporated enterprises where the production is mainly sold or bartered (intended for the market), all of the production of the unit is included in production by the informal sector, while where the production is mainly for own final use, it is allocated to the household own-use production and community sector.

Formal sector, informal sector and household own-use production and community sector

- 39.18 The SNA does not use the expression formal sector, but it is not difficult to conceive of all units in the corporations sectors, general government and NPISHs as being part of a formal sector as far as

production is concerned. Quasi- corporations are included because they are included in the corporations sectors. However, this is not the same as saying that any unit that is not informal is formal, since households with unincorporated enterprises not included in the informal sector are divided between those that are treated as formal and the rest that are included in the household own-use production and community sector.

- 39.19 The meaning of household units according to the 21st ICLS resolution is thus quite different from that of the SNA since the SNA includes as households all the units included under the 21st ICLS resolution as informal and mainly producing for the market, plus households mainly producing for own final use, plus those units with unincorporated enterprises treated as formal, plus households as consumers plus institutional households.

2. INFORMAL PRODUCTIVE ACTIVITIES

- 39.20 **Informal productive activities** are defined as all productive activities carried out by persons or economic units that are – in law or in practice – not covered by formal arrangements as established by regulations and laws, such as:

- a. regulations that stipulate the rights and responsibilities and obligations of the economic units and the workers;
- b. commercial laws that regulate the productive activities carried out by economic units and their engagement in commercial contracts, including to safeguard their intellectual and physical property;
- c. procedures to report economic activities such as fiscal obligations in order, for example, to pay taxes or to cover employees by social security;
- d. labour laws and regulations such as those relating to freedom of association, rights to collective bargaining, paid annual leave, paid sick leave, the minimum wage, hours of work, social security coverage and social dialogue; and
- e. procedures that regulate access to the institutional infrastructure such as markets, governmental support mechanisms and financial institutions including banks.

- 39.21 Coverage by formal arrangements in law and in practice does not merely imply having legal coverage by the formal arrangements but means that the arrangements should be effectively accessed in practice by the worker and the economic unit by fulfilling procedures that entail duties and obligations for all parties involved.

- 39.22 Informal productive activities can be viewed as an underlying concept that contributes to recognizing two highly linked but also slightly different perspectives of informality, i.e., the perspective of workers and the perspective of economic units. This concept forms the conceptual foundation from which the different statistical components are derived and points toward which statistical components should be statistically quantified and described.

- 39.23 Informal productive activities of persons include informal tasks and duties carried out by persons in informal employment; in formal employment, carrying out partly informal activities tasks and duties; or in unpaid trainee work, volunteer work, own-use production work and other work activities (see section C of this chapter). Informal productive activities of economic units include informal production carried out by economic units in the informal sector or by households producing for own final use, including direct volunteer work, and production by non-formal non-profit organizations. Informal productive activities may be undertaken in most kinds of economic activity, including the agriculture, forestry and fishing industry, and include household own-use production work within the general production boundary. Housing services of owner occupiers are by convention excluded from the informal economy because no informal labour inputs are used for this production activity.

3. THE INFORMAL ECONOMY

- 39.24 The **informal economy** comprises all informal productive activities of persons or economic units, whether or not they are carried out for pay or profit. The concept of the informal economy enables the comprehensive measurement of the informal productive activities carried out by economic units and of informal productive activities by workers in relation to employment and undertaken through forms of work other than employment.
- 39.25 For statistical purposes, the concept of the **informal market economy** is defined as all production for pay or profit in the informal sector and all productive activities of workers in employment that are – in law or in practice – not covered by formal arrangements.
- 39.26 Illegal and illicit activities where the production of goods and services are forbidden by law are excluded from the informal economy. However, the production of goods and services, that are usually legal, but become illegal when carried out by unauthorized producers, should be included in the informal economy.
- 39.27 The exclusion of illegal and illicit activities where the goods and services are forbidden by law relates only to the scope of what is measured in the informal economy. In the SNA, illegal productive activities that fit the characteristics of transactions are treated the same way as legal actions and are therefore included within the SNA production boundary (see SNA paragraph 7.53). For example, if the sale of narcotics is forbidden by law, those activities should be excluded from the informal economy statistics, although they are included in the SNA. Similarly, imports and exports of illegal goods and services are included in the external statistics but should be excluded from statistics on informal trade. Transactions in stolen goods are also included in the SNA and BPM but excluded from statistics on the informal economy and from informal trade. However, some activities that are usually legal may be carried out illegally because they are conducted by an unregistered producer (for example, the sale of transport services by an unregistered producer). These activities that are usually legal but may be carried out illegally are not to be regarded as illegal activities and are included in the informal economy statistics as well as the [BPM/SNA].

4. FORMAL SECTOR, INFORMAL SECTOR AND HOUSEHOLD OWN-USE PRODUCTION AND COMMUNITY SECTOR

- 39.28 The criteria used to identify the sectors in the statistics on the informal economy are based on the intended destination of the production and the status of (in)formality of the economic unit. The intended destination reflects whether, or not, the production is mainly intended for the market with the purpose of generating a profit and income. The criterion of production that is “mainly intended for the market” is similar to the SNA definition of market producers as establishments, “all or most of whose output is market production” (see SNA paragraph 7.144). The formal status of the economic unit reflects whether the unit is formally recognized by government authorities as a distinct producer and is thus covered by formal arrangements.
- 39.29 The framework for informal economy statistics assigns all economic units to one of three sectors: the formal sector, the informal sector or the household own-use production and community sector, depending on the intended destination of the production and the status of (in)formality of the economic unit.
- 39.30 The **formal sector** comprises economic units that are formally recognized as distinct producers of goods and services for the consumption of others and whose production is mainly intended for the market with the purpose of generating an income or profit or for a non-profit purpose (i.e. non-profit institutions), or non-market production for use by other economic units, including the society as a whole. With respect to the SNA sectors, financial and non-financial corporations and general government are always formally recognized and therefore are part of the formal sector. In addition, formally recognized NPISHs are part of the formal sector. Households are assigned to the formal sector if they undertake production through a household unincorporated market enterprise that is registered in a government established system of registration or employs one or more persons to work as an employee with a formal job. Household unincorporated market enterprises that keep a

complete set of accounts for tax purposes are treated as quasi-corporations and included in either the financial or non-financial corporations sectors in the SNA and as part of the formal sector in the ILO statistics.

- 39.31 The **informal sector** comprises economic units whose production is mainly intended for the market with the purpose of generating income and profit but that are not formally recognized as producers of goods and services distinct from the own-use production of the owner-operators' household. These economic units are all classified in the SNA as part of the household sector and may include informal partnerships. These economic units undertake production mainly intended for the market through a household unincorporated market enterprise that does not keep a set of accounts for tax purposes, is not registered in a governmentally established system of registration and does not employ one or more persons to work as an employee with a formal job.
- 39.32 The **household own-use production and community sector** comprises either: households whose production (excluding housing services of owner occupiers) is mainly for the household's own final use or for the use of other households, without the purpose of generating income and profit for the producing household or households; or non-formal non-profit organizations (i.e. informal and temporary NPISH), serving households. These units are characterized by not being formally recognized as distinct producers of goods or services and undertaking production that is mainly intended for the own final use of households or for the use of other households without the purpose of generating an income or profit. The production boundary for the household own-use production and community sector extends the SNA production boundary in that the sector includes (and the SNA production boundary excludes) most services produced for own use by households (see SNA paragraphs 7.28–7.32).
- 39.33 Table 39.1 illustrates the classification of economic units in the formal sector, the informal sector and the household own-use production and community sector, adding detail on the different forms of informal paid and unpaid work that may be used as input to their formal or informal production.

Table 39.1: Informal productive activities in the informal economy

| Sector | | Formal sector | Informal sector* | Household own-use production and community sector | | |
|--------------------------------------|-----------------------|---|---|--|--|----------|
| Informal productive activities | | Production in the formal sector is never informal All informal labour inputs of workers engaged by: formal household unincorporated market enterprises, formal NPISHs, corporations, and general government | All production by informal household unincorporated market enterprises All labour inputs used to undertake this production | Production by household engaging informal employees All labour inputs used to undertake this production | Informal household own-use production including non-formal non-profit organizations and direct volunteers All labour inputs used to undertake this production | |
| Type of informal labour inputs | For pay or profit | Informal employment* | Informal employment* | Informal employment* | | |
| | | Partly informal labour inputs of persons in formal employment* | | Partly informal labour inputs of persons in formal employment* | | |
| | Not for pay or profit | Informal unpaid trainee work | Informal unpaid trainee work | | Informal volunteer work | |
| | | Informal volunteer work | Informal volunteer work | | Own-use production work | |
| Relation to SNA production boundary: | | Goods and Services | | | Goods | Services |
| | | SNA production boundary** | | | | |
| | | General production boundary | | | | |

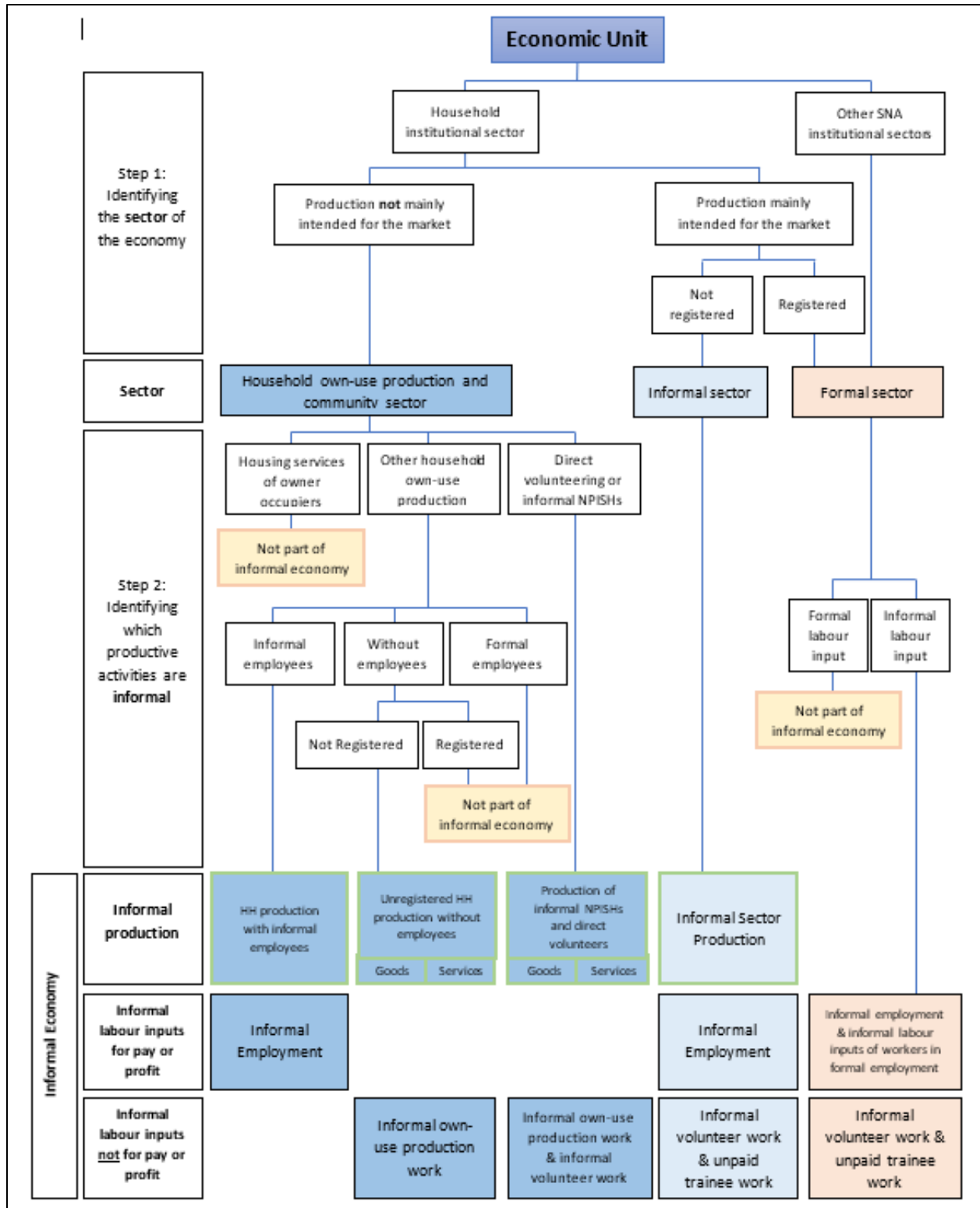
* Components of the informal market economy

** The SNA production boundaries also includes illegal activities that are out of scope in the informal economy framework.

39.34 The 21st ICLS *Resolution Concerning Statistics on the Informal Economy* includes a set of operational definitions used to clearly identify the economic units belonging to each of the three sectors. Figure 39.1 illustrates how the framework identifies informal productive activities of

economic units. The links between the three sectors (i.e., the formal sector, the informal sector, and the household own-use production and community sector) and the institutional sectors of the SNA are shown in Table 39.2.

Figure 39.1: Decision tree to identify informal productive activities of economic units



Note: The measure of production used in this decision tree is based on the general production boundary.

Table 39.2: The formal sector, informal sector and household own use production and community sector and its relation to the SNA institutional sectors

| | SNA institutional sectors | | | | | | | | |
|---|--|---|----------------------------|-----------------------|---|--|---|--|---|
| | a) Non-financial corporations and b) Financial corporations | | c) General government | d) NPISHs | e) Households | | | | |
| Type of SNA institutional unit | Corporations | Quasi-corporations | Government units | NPISH | Households (excluding institutional HH and HH as consumers) | | | | |
| | | | | | Unincorporated household market enterprises | | Own-use production | | |
| Main type of production | Market production | Market production | Non-market production | Non-market production | Market production | Market production | Own-use production | | |
| | | | | | | | Housing services of owner-occupiers | Production by households for own use with employees | Production by households for own use without employees. Including non-formal non-profit organizations and direct volunteers. |
| Operational definition as part of identifying the formal status | Incorporated enterprise | Have a complete set of accounts; registered for tax or similar purposes | Always formally recognized | Registration | Registered or engages formal employees. | Not registered and does not engage formal employees. | Never informal | Production is informal if employees are informal employees | Direct volunteers and non-formal non-profit organizations are always informal; other HH production for own use without employees is informal unless production is registered. |
| Within SNA production boundary | Yes | | | | | | | Goods Yes | Services No |
| Sector of the economy | Formal | | | | | Informal Sector | Household own-use production and community sector | | |

| | | | | | |
|---|------------------------------------|---|-----------|--|---|
| Productive activities are part of informal economy | Only informal labour inputs | Yes, both production and labour inputs | No | Yes, both production and labour inputs if employees are informal. | Yes, both production and labour inputs unless production is registered |
|---|------------------------------------|---|-----------|--|---|



C. INFORMAL WORK

- 39.35 This section defines and classifies informal work in the 21st ICLS resolution, points to the alignment of these concepts with international standards such as the International Classification of Status in Employment, presents the informal productive activities of persons in relation to the sectors in the 21st ICLS resolution, and defines and presents informal and formal employment in relation to those same sectors.
- 39.36 The 21st ICLS *Resolution Concerning Statistics on the Informal Economy* related to measuring informal productive activities of persons provides a set of definitions for distinct subsets of informal work. In the informal economy, the concept of “productive activities of persons” is aligned with the definition of “work” in the international standards of work, employment, and labour underutilization. It includes activities within the SNA production boundary as well as activities outside the SNA production boundary but inside the general production boundary. Work can be subdivided into five distinct forms:
- a. own-use production work;
 - b. employment work;
 - c. unpaid trainee work;
 - d. volunteer work;
 - e. other work activities.
- 39.37 Informal work consists of productive activities performed by persons, as defined by the latest standards on work and employment, that are – in law or in practice – not covered by formal arrangements such as, regulations and provisions that promote or facilitate the work and protect and regulate the actions and functions of the worker. It comprises:
- a. productive activities carried out by persons in employment that are, in law or in practice, not covered by formal arrangements such as regulations and laws that stipulate the rights and responsibilities, obligations and protection of the economic units and the workers; and
 - b. productive activities carried out in relation to:
 - i. own-use production work;
 - ii. volunteer work;
 - iii. unpaid trainee work; and
 - iv. other work activities.
- 39.38 Persons carrying out informal productive activities in the informal economy may carry out this work for economic units categorized in the formal sector, informal sector or household own-use production and community sector (see table 39.3).

Table 39.3: Informal productive activities by persons in the informal economy

| Persons | | Informal work | | |
|--|--|---|--|---|
| Main intention of the productive activities | For pay or profit | Not mainly intended to generate pay or profit | | |
| | Informal productive activities in relation to employment | Informal productive activities in relation to forms of work other than employment | | |
| Informal productive activities by persons | Formal employment with partly informal activities * | Informal employment * | Informal unpaid trainee work Informal organization-based volunteer work Informal other work activities | Informal own-use production work Direct volunteer work |
| Sector of the economic unit for which the work is provided | Formal sector | Formal sector | Formal sector | |
| | | Informal sector * | Informal sector * | |
| | Household own-use production and community sector | Household own-use production and community sector | Household own-use production and community sector | Household own-use production and community sector |

* Components of the informal market economy.

1. INFORMAL AND FORMAL EMPLOYMENT

39.39 Statistics on informal employment aim at:

- establishing whether the productive activities defined as employment are, in law and in practice, covered by formal arrangements and the formal status of the economic unit for which this work is carried out; and
- describing the structure and extent of informal employment, identifying groups of persons in employment most represented and at risk of informality, and providing information on exposure to economic and personal risks, decent work deficits and working conditions.

39.40 **Informal employment** is defined as any activity of persons to produce goods or provide services for pay or profit that is - in law or in practice - not covered by formal arrangements such as commercial laws, procedures to report economic activities, income taxation, labour legislation and social security laws and regulations providing protection against economic and personal risks associated with carrying out the activities. Informal employment comprises activities carried out in relation to informal jobs held by:

- independent workers who operate and own or co-own an informal household

- unincorporated market enterprise;
- b. dependent contractors who do not have a formal status in relation to the legal administrative framework or whose activities are not effectively covered by formal arrangements;
 - c. employees, if their employment relationship is not, in practice, formally recognized by the employer in relation to the legal administrative framework of the country or not associated with effective access to formal arrangements; and
 - d. contributing family workers whose work relationships are not formally recognized in relation to the legal administrative framework of the country or not associated with effective access to formal arrangements.
- 39.41 All tasks and duties carried out in relation to an informal job are considered to be informal productive activities. Informal productive activities performed by persons may also be carried out in relation to formal jobs if a subset of the tasks and duties carried out are not effectively covered by formal arrangements.
- 39.42 (*) Persons may have one or several formal or informal jobs, or both, during a given reference period. Dependent workers have an informal or formal job for each economic unit on which the worker is dependent. Independent workers have an informal or formal job for each informal or formal economic unit they operate and own or co-own. (Independent and dependent workers are discussed in SNA paragraph 16.41.) Employed persons with an informal main job comprise all employed persons with an informal main job where the main job is the job with the longest hours usually worked as defined in the latest international statistical standards on working time. In the absence of information regarding hours usually worked, other information such as income from each job could be used to identify the main job. Employed persons with an informal secondary job comprise all employed persons with an informal second job or additional jobs.
- 39.43 (*) The International Classification of Status in Employment (ICSE-18) classifies jobs held by persons according to type of authority. There are two broad categories: independent workers and dependent workers, where the former includes owner-operators of corporations and independent workers in household unincorporated market enterprises, and the latter includes dependent contractors, employees and contributing family workers.
- a. Independent workers own the economic unit for which they work and control its activities.
 - b. Dependent workers are workers who do not have complete authority or control over the economic unit for which they work.
- 39.44 (*) Persons holding informal jobs may be categorized in the informal sector, formal sector or household own-use production and community sector, depending on the sector of the economic unit for which the work is carried out or, in the case of dependent contractors, on their formal status in relation to the legal administrative framework of the country.
- 39.45 (*) **Formal employment** is defined as any activity of persons to produce goods or provide services for pay or profit in relation to a formal job, where the activities are effectively covered by formal arrangements. Formal employment comprises productive activities carried out in relation to formal jobs held by:
- a. independent workers in employment who operate and own or co-own a formal economic unit;
 - b. dependent contractors who have a formal status in relation to the legal administrative framework of the economy and whose activities are associated with effective access to formal arrangements;
 - c. employees, if their employment relationship is, in practice, formally recognized by the employer in relation to the legal administrative framework of the economy and associated with effective access to formal arrangements; and

- d. contributing family workers carrying out work for a formal economic unit and whose work relationships are formally recognized in relation to the legal administrative framework of the economy and associated with effective access to formal arrangements. Registration of the job held by the contributing family worker and contribution to a job-related statutory social insurance scheme implies that the worker is employed formally in that job.
- 39.46 (*) Persons holding formal jobs may be categorized in the formal sector or household own-use production and community sector depending on the sector of the economic unit for which the work is carried out or, in the case of dependent contractors, on their formal status in relation to the legal administrative framework of the economy.
- 39.47 (*) Table 39.4 shows informal and formal jobs for five types of status in employment—owner-operators of corporations, independent workers in household unincorporated market enterprises, dependent contractors, employees, and contributing family workers. The cells numbered 1 through 8 represent various types of informal jobs. The cells shaded in light blue refer to formal jobs, and cells shaded dark blue are jobs which, by definition, do not exist in the economic units in that sector. The 21st ICLS *Resolution Concerning Statistics on the Informal Economy* elaborates the definitions used to clearly identify the five types of status in employment.

Table 39.4: Informal and formal jobs by status in employment and sector (*)

| Sector of the economic unit for which the work is carried out | Independent workers ¹ | | | Dependent workers | | | | | |
|---|--|---|----------|------------------------------------|----------|-----------|----------|-----------------------------|----------|
| | Owner-operators of corporations ² | Independent workers in household (unincorporated) market enterprises ³ | | Dependent contractors ⁴ | | Employees | | Contributing family workers | |
| | | Formal | Informal | Formal | Informal | Formal | Informal | Formal | Informal |
| Formal sector | | | | 1 | | 2 | | 3 | |
| Informal sector | | 4 | | 5 | | 6 | | 7 | |
| Household own-use production and community sector | | | | | | 8 | | | |

Note: Cells shaded in dark blue refer to jobs, which, by definition, do not exist in economic units located in the specific sector. Cells shaded in light blue refer to formal jobs. Informal employment consists of the informal jobs in cells 1–8.

¹ Including employers and independent workers without employees (before ICSE-18 labelled Own-account workers).

² Including the ICSE-18-A categories 11 and 21.

³ Including the ICSE-18-A categories 12 and 22.

⁴ The sector of dependent contractors does not reflect the sector of the economic unit on which they depend but their formal status in relation to the legal administrative framework of the country.

⁵ The existence of formal jobs among contributing family workers carrying out work for an economic unit in the formal sector depends on the national context (see paragraph 39.45d).

5.48 Depending on the national context and need, countries may identify persons with formal jobs carrying out partly informal productive activities and report the number of such persons, the hours spent on informal activities, or the earnings received from paid informal activities in relation to formal jobs.

2. (*) INFORMAL WORK OTHER THAN EMPLOYMENT

39.49 Informal work other than employment comprises informal productive activities in relation to own-use production work, volunteer work, unpaid trainee work and other work activities where the unpaid work is not covered by formal arrangements such as regulations and provisions that promote or facilitate the work and protect and regulate the actions and functions of the worker. Measuring the informal or formal nature of work other than employment supports the recognition and valuation of all forms of work, essential for achieving development goals such as attaining gender equality, social inclusion and social protection and reducing poverty. Informal work other than employment is not included in Table 39.4. Detailed definitions of informal work other than employment are provided in the 21st ICLS *Resolution Concerning Statistics on the Informal Economy*.

D. DIGITALIZATION AND INFORMAL CROSS-BORDER FLOWS

39.50 The conceptual framework, definitions and classifications that underlie the statistics on the informal economy and their relation to the System of National Accounts were presented in sections B and C. In practice, compilers will be confronted with many practical issues in collecting data and deriving estimates for informal activities. This section focuses on two issues that are of particular interest to national accounts and balance of payments statistics – digitalization and informal cross-border flows.

1. DIGITALIZATION

39.51 Digitalization penetrates many aspects of economic activity which leads to concerns about the possible mismeasurement of economic activity. New types of economic activities often make use of digital technologies and create new types of jobs, including jobs that are considered informal. Many of these jobs facilitated by digitalization are in the role of dependent contractors as described in Section C of this chapter.

39.52 Most of the new forms of dependent contractors facilitated by digitalization are dependent on large formal enterprises that provide a digital intermediation service. Examples include households that provide transport or accommodation services. The formal or informal status of dependent contractors would vary based on the legal administrative framework of an economy, which regulates the ties between dependent contractors and formal economic units. For example, if dependent contractors are registered, participate in social insurance schemes or are regulated by the government in ways that facilitate their work or protect them as workers, they are classified as formal workers. If the government does not require the formal economic units to register or provide formal regulations or protections to the dependent contractors with whom they work, then the dependent contractors will be informal workers.

39.53 Digitalization facilitates household participation in production activities that can be informal, such as through digital marketplaces. Digitalization also provides opportunities for households to deliver interactive services such as online learning and entertainment channels where income is earned by the household through advertising or from viewer subscriptions. Households that receive monetary remuneration for uploaded content can be considered unincorporated household enterprises. If the household is not recognized by government authorities as a distinct market producer and thus is not covered by formal arrangements, then it is regarded as an informal enterprise. For multinational enterprise groups that operate digital platforms in a number of countries, the formal/informal status of the dependent contractors may vary from country to country depending on the legal arrangements in each country.

39.54 Additional general information on the role of digitalization and how it should be accounted for is provided in chapter [22 (SNA)/16 (BPM7)].

2. INFORMAL CROSS-BORDER FLOWS **[THIS WILL BE A HEADLINE SECTION IN BPM7]**

39.55 Informal cross-border flows pose challenges to data collection and estimation because they represent transactions undertaken by small units and households that may not be covered by the regular data collection programmes used for external sector statistics.

39.56 The framework for the informal economy presented in this chapter relates to the production of goods and services in the domestic economy. It is possible to extend the framework to account for external transactions related to activities of informal workers and informal economic units. These transactions would be recorded primarily in the current account and include the following:

- a. Trade in goods conducted by informal workers and informal economic units;
- b. Trade in services by informal economic units (exports and imports);
- c. Informal employment of non-resident workers;

- d. Remittances related to the informal economy.
- 39.57 Trade in goods conducted informally includes small scale but frequent movement of goods between neighboring countries by informal units or workers, shuttle trade (see BPM x.xx), fish catch traded between vessels at sea where the vessel of the compiling economy is operated by informal units, and smuggling of otherwise legal goods by informal units or workers.
- 39.58 If an informal worker carries goods over the border for a formal enterprise, then the change of ownership is between a formal unit and a non-resident. In this case, only the work done by the carrier of the goods would be part of the informal economy (either a service by an unincorporated market enterprise or work by an informal employee). The payment from the formal unit to the carrier of the goods could be either an international or a domestic transaction depending on the residency of the parties.
- 39.59 The carriage of goods by informal workers and informal economic units across country frontiers is an important component of the informal economy, particularly in developing countries. Compilers of trade in goods are encouraged to collect data on the value of goods traded by informal units and workers and to gather information on the persons conducting informal trade when these activities are significant. One approach that has been used is to conduct routine surveys at border stations where imports and exports of goods that are carried over the border by informal units or informal workers can be recorded or observed.
- 39.60 Trade in services by informal units includes services such as:
- a. Room rental, ride services or informal restaurant and bar services that are provided by informal units to travelers who are temporarily present in the reporting economy;
 - b. Exports and imports of services such as hairdressing, housekeeping and caring for persons, or construction provided by self-employed persons that move across borders but are not registered in a governmentally established system of registration in either their economy of residence or the economy of activity (see paragraph[(BPM) 4.116-4.119] for a discussion of residency); and
 - c. Cross-border services that are delivered online such as tutoring, wellbeing and other income generating online services where the service-provider is working informally and has not registered in a governmentally established system of registration.
- 39.61 Undeclared and underdeclared trade in goods or services by formal units is not part of the informal economy but may be accounted for as non-observed international trade – see section F of this chapter.
- 39.62 Some trade that is part of the informal economy in one economy may not be considered informal in the counterpart economy. This would occur, for instance, if a fishing vessel operated by an informal unit traded with a fishing vessel operated by a formal unit from another economy. Another example would be for accommodation services provided by informal units to non-residents; this would be considered part of the informal economy in the economy of the service provider, but for the economy of the traveler this would not generally be recorded in the statistics on the informal economy.
- 39.63 Some nonresidents such as seasonal workers and nonresident students may engage in informal employment because they do not have the appropriate employment permits to engage in formal employment. Volunteer work by nonresidents may also be considered informal depending on whether the work satisfies the criteria discussed in paragraph 39.49 and the 21st ICLS *Resolution Concerning Statistics on the Informal Economy*.
- 39.64 The 21st ICLS resolution does not discuss remittances. However, as migrant workers and non-national residents are often at risk of informality, it may be informative to provide information on remuneration of employees and personal transfers that relate to informal workers and informal economic units.

- 39.65 Remittance outflows related to the informal economy include personal transfers of income earned from informal employment by residents and personal transfers from income earned by resident persons belonging to an informal economic unit, as well as remuneration of employees less transport and travel of border, seasonal and other short-term nonresident workers such as unregistered nonresident domestic workers employed by households. The counterpart country would record these data as remittance inflows, but the information may not inform the same policy needs as other data on the informal economy.
- 39.66 As explained in paragraphs 39.26–39.27, trade in goods and services that are forbidden by law are excluded from the statistics on the informal economy. However, the balance of payments statistics include all trade in illegal goods and services, so care should be taken in reconciling the balance of payment statistics with external transactions from statistics on the informal economy to account for the difference in treatment.

E. DATA SOURCES AND PRESENTATION OF INDICATORS

- 39.67 The standards for statistics on the informal economy described in sections B and C provide the conceptual basis for statistics to be compiled in a harmonious and comparable manner from different data sources. The sources and data collection methods will depend on statistical capacity, national priorities, measurement objectives and the relevant reference unit.

1. CRITERIA FOR SELECTING DATA SOURCES (*)

- 39.68 (*) Complete coverage of the desired elements might require the use of multiple sources. A close collaboration between different national institutions, including the main users of the data, national statistical offices and other national data producers is important to ensure harmonization across sources and institutions.
- 39.69 (*) Different data sources each have their own strengths and limitations and can be viewed as complementary to provide data on different aspects of the informal economy. The ILO provides methodological guidance that can facilitate international comparability for data on the informal economy.
- 39.70 (*) For any data source the quality of the data generated will be determined by the combination of methodologies used and concepts applied. Differences in survey sample sizes, population coverage, unit of observation, ability to apply definitions comprehensively and range of data generated, among others, will have implications in respect of precision, bias and comparability across sources. When planning the system of statistics on informality, close attention should be paid to the methodologies used to ensure that estimates generated are as representative as possible of the target population, that the coverage of indicators produced is in line with objectives, and that samples are adequate to achieve desired levels of precision.
- 39.71 (*) To enable clear and appropriate interpretation of the statistics it is crucial that data quality is assessed and reported on transparently. Metadata describing the source, the concepts, the methodologies, and the results generated should be published alongside any published data.

2. DATA COLLECTION (*) NOTE THAT SECTION E WILL NOT HAVE ANY SUBSECTIONS IN BPM7

- 39.72 (*) In general, household-based surveys, particularly labour force surveys, are important data sources for producing statistics with persons and jobs as reference units. Labour force surveys, generally characterized by detailed sequences of questions on the characteristics of jobs, are typically the recommended source of statistics for monitoring the extent of informal and formal jobs, assessing levels of informality and formality and levels of protection and vulnerability,

identifying persons most exposed to and most represented among informal jobs, and assessing the working conditions of persons in formal and informal jobs. They are also a useful source to identify drivers of informality associated with the structure of the labour market. A combined household-establishment survey may be able to meet the same objectives.

- 39.73 (*) Other household surveys, such as surveys on poverty and living standards, or household income and expenditure surveys, generally include less detailed sequences of questions on labour and may be designed with smaller sample sizes than a typical labour force survey. When such surveys include questions to identify persons having informal and formal jobs, they can be particularly suited to the production of data to analyse the relationship between informality and the main topics covered by the survey such as poverty, the level and composition of income and expenditure, and access to social protection beyond job-related contributory social security.
- 39.74 (*) Other specialized household surveys, such as time-use surveys and household-based surveys on agriculture, education and training, or specialized surveys on digital platform employment and labour migration, may be better suited for the measurement of specific working activities, or for focusing on specific subgroups of the population. Time-use surveys can be an important source for the production of statistics on participation and time spent in informal unpaid work such as the own-use provision of services (in particular informal unpaid domestic work and care work). Surveys targeting specific subgroups of the population might be more appropriate for groups whose total number might be small in labour force survey samples, limiting the possibility to produce reliable statistics. It should be taken into account that the constraints of sample surveys often mean that certain groups at greater risk of informality, such as persons with a disability, migrant workers or digital platform workers, are also those likely to be under-represented in the sample.
- 39.75 (*) National population censuses are an important source of statistics on employment and often provide the basis for designing survey samples, integrating national data sources, and producing small area estimates. Including questions to classify those employed according to the formal or informal nature of their job can allow the generation of estimates of informality for small geographical areas as well as for small population groups.
- 39.76 (*) Economic censuses, enterprise-based surveys and mixed surveys are the main data sources for the analysis of informal sector and formal sector economic units, their production and contribution to GDP, and their characteristics. In general, due attention should be paid to ensuring that the scope of activities and type of economic units covered (in terms of size, place of work, economic activity and institutional sector) do not imply an exclusion of economic units likely to be informal (for example, independent workers without employees, units under a certain size threshold, units carrying out agricultural activities, units with non-fixed premises or home-based activities). To achieve comprehensive coverage of informal sector units, special attention should be paid to the sampling methods and frame used. The use of area-based sampling frames can be a useful method to establish an exhaustive list of units covering household-based activities and activities taking place in non-fixed locations.
- 39.77 (*) Mixed surveys, that is, combined multi-stage household and establishment surveys, are specifically designed to identify and target economic units in the informal sector. Deriving their sample from a representative household survey, such as the labour force survey, ensures the inclusion of all types of activities within the informal sector, home-based activities, activities carried out from fixed locations as well as non-fixed locations. This requires an identification of economic units in the informal sector, through their owner(s), in the first phase. Care should be taken to ensure a sufficient sized representative sample of economic units in the informal sector.
- 39.78 (*) Administrative records can be used as part of an indirect estimation of informal employment and of the informal sector because they provide information on formal employment and the formal sector. The number of persons covered by formal arrangements can, for example, be estimated in taxation systems, employment services and social security schemes. The size of the formal sector could be estimated by the use of business registers, tax registers and the like. The possibilities to do so depend on the structure and content of the country-specific administrative sources. Priority should, however, in general be given to direct methods based

on household surveys and enterprise-based surveys or mixed surveys for more accurate estimations of the total informal employment and the informal sector. Administrative information such as legal identity of the economic unit, taxation, declared earnings or income and contributions to social insurance in relation to a specific job can also be used as relevant auxiliary information in surveys to further support the identification of formal jobs and formal economic units. This requires that a direct linkage at the level of persons and jobs or economic units is feasible in the country.

[The following paragraphs will replace the above in *BPM7*. The '(x)' denotes *BPM7*-only paragraphs that will not be in *SNA*.]

- 39.79 (x) Compilers can use a range of statistical approaches including a combination of direct and indirect sources to estimate the size of the activities of the informal economy. These methods would be determined by the features of the informal economy in the compiling country as well as availability of source data and statistical capacity. The exchange of experiences and knowledge between national accounts and balance of payments compilers, and, also, between regulatory and policy agencies and statistics-producing agencies can be used to develop, for example, statistical models to estimate informal activities. National compilers are also encouraged to use innovative data sources, such as those provided by financial intelligence units and law enforcement agencies to develop estimates. In general, coverage of the informal economy, in both the national accounts and external sector statistics, requires additional source data, including through surveys.
- 39.80 (x) Details of sources and survey methods for collecting data on the informal activities in the economy are presented in 2025 *SNA* chapter 39 – Informal economy which is a joint or companion chapter to this current chapter. The methods described in the *SNA* chapter can be applied to gather data on the informal economic units and persons who trade informally, particularly for trade in services.
- 39.81 (x) If trade in goods and services is compiled separately from the national accounts, or if more than one agency is involved, compilers can cooperate to provide coherent statistics on the informal economy and to avoid duplication of work.
- 39.82 (x) Compilers may wish to identify trade that is estimated using these approaches as an “of which” sub-item of trade in goods and trade in services. Compilers may also choose to present data in a standalone publication with information, for example, on the extent of informal trade, the products being traded, the gender and nationalities of the persons involved in trading, and the modes of transport being used.
3. (*) PRESENTING INDICATORS ON THE INFORMAL ECONOMY [THIS SECTION IS EXCLUDED FROM *BPM7*]
- 39.83 To support the development of national policies and interventions for addressing the consequences of informality and facilitating transitions to formality based on evidence, a set of indicators should be selected reflecting the national context, priorities and objectives. The indicators to be produced will depend on the specific component of the informal economy under scrutiny, data sources and national policy goals. The information relating to activities undertaken informally extends, in terms of the *SNA*, only as far as the production account and the generation of earned income account.
- 39.84 The indicators linked to the different components of the informal economy could be structured to provide information on six dimensions of informality:
- a. the extent of informality – the prevalence of informality across jobs, economic units and

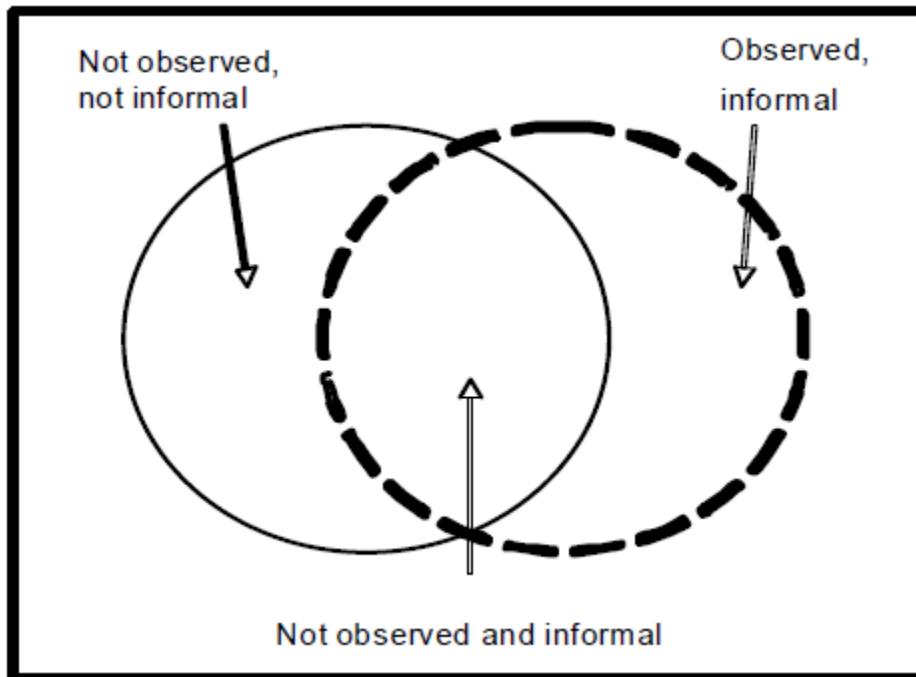
- activities;
- b. the composition of informality – the distribution of informal and formal jobs and economic units by socio-demographic, employment-related characteristics and characteristics of the economic units and socio-demographic characteristics of the owner or owners;
 - c. the exposure to informality – the percentage of persons with informal main jobs and of economic units in the informal sector by socio-demographic, employment-related characteristics and characteristics of the economic units and socio-demographic characteristics of the owner or owners;
 - d. working conditions and levels of protection for those in informal and formal employment, productivity and factors constraining or enhancing the development and sustainability of informal economic units and formal ones;
 - e. contextual vulnerabilities – including poverty, inequalities, discrimination and other conditions such as limited or no access to land and natural resources; and with regard to all income sources and social protection from all household members, as well as the composition of households; and
 - f. other structural factors.

The 21st ICLS *Resolution Concerning Statistics on the Informal Economy* elaborates on the various possible indicators covering these six elements. A wider set of indicators to further support the national production of informality statistics can also be found in the ILO Informal Economy Indicator Framework available at: [insert link to Framework].

F. THE NON-OBSERVED ECONOMY [ADJUSTED IN BPM7 TO DISCUSS NON-OBSERVED TRADE]

- 39.85 The part of the economic activity difficult to measure has become known as the Non-Observed Economy (NOE) and several publications have been dedicated to measuring it, notably the handbook *Measuring the Non-Observed Economy* (Organisation for Economic Co-operation and Development, International Monetary Fund, International Labour Organization and CIS STAT (2002)). As the techniques in the handbook make clear, a specific measure of the non-observed economy is not important in itself. Attention focuses on ensuring that the measurement of total production is complete or “exhaustive”. The term non-observed economy is used in the context of achieving exhaustiveness of national accounts statistics, focusing on GDP in the context of production. In the same way, non-observed trade is used to describe cross border trade that is difficult to measure in the context of exhaustiveness.
- 39.86 There is a large overlap between the non-observed [economy/trade] and the informal [sector/trade]. (We focus here on the informal sector rather than the informal economy because the activities of the informal sector are entirely within the SNA production boundary and can thus be compared to the non-observed economy.) However, while the non-observed [economy/trade] and the informal [sector/trade] overlap, neither is a complete subset of the other. This can be seen in figure 39.2. The solid circle represents the non-observed [economy/trade] and the dotted circle the informal [sector/trade]. Thus, the overlap consists of [activities/trade] that are not observed and undertaken informally but there are some [activities/trade] that are not observed but are not undertaken informally and some that are undertaken informally but are observed. The relative size of the three segments in figure 39.2 will vary from country to country.

Figure 39.2: The non-observed economy and the informal sector [with similar diagram replacing trade for economy in *BPM7*]



- 39.87 Efforts to cover the non-observed [economy/trade] ensure that all enterprises are covered in statistical estimates even if not covered by statistical enquiries. Some of the supplementary estimates may well relate to those activities of household unincorporated enterprises considered to be informal, but some will relate to large enterprises, not regarded as informal. In addition, the non-observed [economy/trade] aims to cover misreporting in large enterprises, whether this is inadvertent or deliberate.
- 39.88 Within the informal sector, some information may be captured statistically. Consider a household that lets rooms to visitors for one or several nights. The activity cannot be treated as a quasi-corporation because it is impossible to make a clear separation of costs from regular household costs and to partition that fraction of the house treated as an asset associated with the letting of rooms from its main function as a family home. However, the value of the letting activity may be captured in a survey directed at tourism activities, for example.
- 39.89 Other examples might be considered. [Street traders/Individual cross-border traders] or taxi drivers may be both not observed and informal. A small food producer may be formal but [too small to be covered by statistical enquiries/may trade at below threshold values] and therefore not observed. Teaching assistants may be informal but observed. The situation is complicated by the fact that street traders, taxi drivers, small food producers and teaching assistants may be formal in some countries and informal in others, just as they may be observed in some and not in others.
- 39.90 It should be noted that all economies have both non-observed parts of their economies and informal enterprises, though the scale of each and the policy interest in identifying them may vary. More detailed information about the scope and measurement of the non-observed economy is available in publications such as the one mentioned in paragraph 39.84.

G. GUIDELINES AND HANDBOOKS ON THE INFORMAL ECONOMY AND THE NON-OBSERVED ECONOMY

39.91 Significant advances in methodology have taken place in fields related to the informal economy. Also, countries have gained extensive experience in collecting and working with data on the informal sector. These developments are highlighted in various guidelines and handbooks on statistics on the informal economy as well as handbooks on the measurement of the non-observed economy in the SNA.

- As discussed in this chapter, the *Resolution Concerning Statistics on the Informal Economy* adopted at the 21st International Conference of Labour Statisticians, (International Labour Office, 2023) provides the standards for statistics on informality.
- The International Labour Organization also prepared a manual in 2013 for preparing estimates of the informal sector and informal employment, *Measuring Informality: A Statistical Manual on the Informal Sector and Informal Employment* (International Labour Office, 2013). Although this manual pre-dates the latest standard presented in the 2023 ILO *Resolution*, it nevertheless provides useful guidance on practical aspects of collecting and compiling informality statistics.
- A wider set of indicators to further support the national production of informality statistics can also be found in the ILO Statistics on the Informal Economy page available at: <https://ilostat.ilo.org/topics/informality/>.
- Chapter 6 of the Eurostat manual, *Essential SNA: Building the Basics* (European Union, 2014) provides a practical overview of how to address exhaustiveness, the non-observed economy, and statistics on informality. Eurostat has also developed a “Tabular Approach to Exhaustiveness” which is used to help ensure comparability.
- Research on statistical methods for improving the exhaustiveness of measures of economic production led to the preparation of the handbook, *Measuring the Non-Observed Economy - a Handbook* by the Organisation for Economic Co-operation and Development, International Monetary Fund, International Labour Organization and CIS STAT (2002).
- The UNECE published *Non-Observed Economy in National Accounts: Survey of Country Practices* (United Nations Economic Commission for Europe, 2008) which summarizes practices as of that date in measuring non-observed economic activities to ensure the exhaustiveness of their national accounts.
- Eurostat published *Handbook on the Compilation of Statistics on Illegal Economic Activities in National Accounts and Balance of Payments* (Publications Office of the European Union, 2018) which provides guidance on the concepts and definitions of illegal activities, recommended methodological frameworks for compiling data, and data sources and statistical techniques for recording illegal economic activities.



Chapter 19. Selected Issues in Integrated Balance of Payments and International Investment Position Analysis

Chapter 19 Selected Issues in Integrated Balance of Payments and International Investment Position Analysis

A. Introduction

19.1 This chapter provides an introduction to the use of integrated BOP and IIP data in economic analysis. Preceding chapters of this *Manual* present the concepts underlying the components used in the external accounts. The importance of this accounting and statistical reporting framework describing an economy's international transactions and positions derives primarily from their impact on the domestic economy. Although the external accounts are sometimes called the “external sector” or “rest of the world sector,” they do not constitute a sector, in the sense of a group of institutional units with similar motivations. Rather, the external accounts show the relationship between domestic sectors and the rest of the world. This chapter discusses some of these major links.

19.2 This discussion directs particular emphasis to the factors influencing external transactions and positions and the extent to which such factors are sustainable. Finally, some of the implications of BOP adjustments for economic policy are considered. In this chapter, it is assumed, by and large, that international and domestic transactions are not constrained by formal or informal administrative controls and that market participants are free to respond to price signals and macroeconomic policies. It is also assumed that the economy does not affect global interest rates.

19.3 Owing to the introductory nature of this chapter, the discussion of BOP financing and adjustment in Sections E and F is not exhaustive, and focuses on an illustrative case that demonstrates fundamental mechanisms and macroeconomic interactions. More complex cases with volatile and highly mobile financial and balance sheet effects bring additional concerns and limitations. These issues are briefly discussed in Section H, but more complete analysis goes beyond the scope of the *Manual*, and the reader is encouraged to refer to additional literature, for which some references are provided in Section I. The chapter does not discuss the special issues associated with a currency union.

B. General Framework

19.4 The relationships among the economic accounts in the *SNA* are described in Chapter 2, Overview of the Integrated Framework. The major accounts can be expressed as accounting identities. Because these are identities, no causation should be inferred. The *SNA* goods and services account shows the balance between supply and use:

$$\begin{aligned} \text{Supply} &= \text{Output} + M \quad (1) \\ &= \text{Use} = C + G + I + X + IC, \end{aligned}$$

where

M = imports of goods and services

C = household consumption

G = government consumption

I = gross capital formation¹

¹Often called investment in economic analysis. The *SNA* uses the term “capital formation” to mean investment in produced nonfinancial assets so as to make a clear distinction from investment in other assets, in particular financial assets. Investment is used subsequently in this section to mean capital formation in the *SNA* sense. Capital formation includes fixed capital, inventories, and valuables.

X = exports of goods and services

IC = intermediate consumption

Because GDP is equal to gross output less intermediate consumption, identity (1) can be rearranged as:

$$GDP = C + G + I + X - M, \quad (2)$$

that is, the expenditure approach to GDP, where

GDP = gross domestic product.

The definition of gross national disposable income (GNDY) is GDP plus net earned and transfer income from abroad, so

$$GNDY = C + G + I + X - M + BEI + BTI, \quad (3)$$

where

BEI = balance on earned income



BTI =

balance on transfer income (net current transfers)

The current account balance is:

$$CAB = X - M + BEI + BTI \quad (4)$$

where

CAB = current account balance

From equations (3) and (4), the current account balance can also be seen equivalently as the gap between disposable income and expenditure:

$$CAB = GNDY - C - G - I. \quad (5)$$

Or equivalently:

$$GNDY = C + G + I + CAB. \quad (6)$$

As defined in the *SNA* use of income account:

$$S = GNDY - C - G, \quad (7)$$

where

S = gross saving.

Substituting identity (3) in (7),

$$S = I + CAB, \quad (8)$$

which can be rearranged as:

$$S - I = CAB. \quad (9)$$

That is, the current account balance is the gap between saving and investment.²

19.5 Thus, the current account balance mirrors the saving and investment behavior of the economy. In analyzing changes in the current account balance of an economy, it is therefore important to understand the manner in which these changes reflect movements in saving and investment. For example, an increase in investment will have the same impact on the current account in accounting terms as a similar decline in saving. However, the longer-run implications for the external position of the economy may be quite different. More generally, identity (9) shows that any increase in an economy's current account balance (e.g., a larger surplus or smaller deficit) is necessarily equivalent to an increase in saving relative to investment. This relationship highlights the importance of ascertaining

²These relationships have been shown for the gross values of production, income, capital formation, and saving, before accounting for depreciation of fixed capital and depletion of natural resources. The relationships also hold if production, income, capital formation, and saving are expressed net of depreciation of fixed capital and depletion of natural resources.

the extent to which any policy measures designed to alter the current account balance directly (e.g., changes in tariffs, quotas, and exchange rates) will affect saving and investment behavior.

19.6 This link between domestic transactions and transactions with the rest of the world is shown in identity (5). The implication of this relationship for BOP analysis is that increasing an economy's current account balance requires a reduction in expenditure relative to income. Alternatively, it may be possible to achieve an increase in the current account balance by means of an increase in national income that is not matched by a commensurate rise in consumption or domestic investment. Implementation of structural measures that increase the efficiency of the economy would be one way to achieve this objective.

19.7 This last point highlights an important aspect of the identities shown previously; these are identities that define relationships among variables rather than describe the behavior of economic agents. By themselves, the identities cannot provide a full analysis of the factors determining developments in the current account. For example, total expenditure on goods and services by domestic residents ($C + G + I$) is likely to be influenced in part by their income ($GNDY$). Thus, it would be inappropriate to use identity (5) to analyze the impact of a change in $GNDY$ on the current account balance without taking full account of the induced response in consumption and capital formation of such a change. This example illustrates the necessity for understanding the spending propensities of residents of the economy when analyzing the BOP.

19.8 The interrelationship of the current account balance with saving and investment can be seen in greater detail by distinguishing between the private and government sectors.

Private saving and investment

(S_p and I_p) and government saving and investment (S_g and I_g)³ are identified as:

³The scope of the "government sector" could be defined as general government or the public sector (definitions of both are given in Chapter 4), according to analytical needs; the private sector would be defined in a complementary way.

$$S - I = S_p + S_g - I_p - I_g. \quad (10)$$

Use of the saving-investment gap identity for the current account in identity (9) then gives:

$$CAB = (S_p - I_p) + (S_g - I_g). \quad (11)$$

This identity shows that, if a negative saving-investment gap in the government sector is not offset by a positive gap on the part of the private sector, the current account will be in deficit, and vice versa. More specifically, the identity shows that the budgetary balance of the government ($S_g - I_g$) may be an important factor influencing the current account balance. In particular, a sustained current account deficit may reflect persistent government spending in excess of revenues, and such excess spending might suggest that fiscal tightening is the appropriate policy action.

19.9 To reiterate an important point, however, identity (11) cannot be used by itself to analyze developments in the BOP in terms of investment and saving on the part of the private and government sectors because there are links between the variables on the right-hand side of identity (11). For example, an increase in taxes could be considered the appropriate policy measure both to raise government saving (or reduce dissaving) and to contribute to an improvement in an economy's current account balance. In analyzing the impact of higher taxes, it is necessary to take account of the behavioral response of private saving and private investment. Private investment could be positively or negatively affected by higher taxes. The effect would depend, in part, on whether the taxes were levied on consumption, an action that would release domestic resources and thereby tend to "crowd in" domestic investment, or on returns to investment. In addition, private saving would tend to fall because of the decline in disposable income caused by taxes on consumption. Similarly, an increase in interest rates could tend to reduce private consumption and investment, but also tend to put upward pressure on the exchange rate with consequent effects on exports,

imports, and differing effects on debt service for domestic currency and foreign currency liabilities.

19.10 Thus, identity (11) provides only a starting point for an analysis of the interaction between saving and investment decisions and the BOP; the identity must be supplemented by specific information about the factors that determine the behavior of both the private sector and the government before the effect of policy measures on an economy's current account can be ascertained.

19.11 As noted in Box [2.1], the basic principle of double-entry bookkeeping used in constructing the BOP implies that the sum of all international transactions—current, capital, and financial—is in principle equal to zero.⁴ Accordingly, the financial account shows how the sum of the current account and capital account balances is financed. For example, imports of goods may be financed by nonresident suppliers so that an increase in imports can be matched by a financial inflow. At the expiration of the financing period, the payment to the nonresident supplier will involve either a drawdown of foreign assets (e.g., foreign deposits held by domestic banks) or the replacement of the liability to the nonresident supplier by another liability to nonresidents. There are also close connections between many financial account transactions. For example, the proceeds from the sale of bonds in foreign financial markets (a financial inflow) may be invested temporarily in short-term assets abroad (a financial outflow).

19.12 This balance between financial and other entries can be expressed as:

$$NLB = CAB + KAB = FAB, \quad (12)$$

where

NLB = net lending/net borrowing

⁴In practice, they may not balance owing to statistical discrepancies.

KAB = capital account balance

FAB = financial account balance

In other words, this identity shows that net lending/net borrowing (from the sum of the current account balance and capital account balance) is conceptually equal to net lending/net borrowing from the financial account. Alternatively, it could be said that the current account balance is equal to the financial account balance, including the balance on reserve asset transactions, less the capital account balance..

$$CAB = FKB + BRT, \quad (13)$$

where

$FKB = (FAB - BRT) - KAB$ (i.e., financial account balance, excluding balance on reserve asset transactions, less the capital account balance)

BRT = balance on reserve asset transactions

19.13 Thus, the net provision of resources to or from the rest of the world, as measured by the current and capital account balances, must—by definition—be matched by a change in net claims on the rest of the world. For example, a surplus on the current and capital accounts is reflected in an increase in net claims, which may be in the form of acquisition of reserve assets on the part of the monetary authorities or other official or private claims on nonresidents (i.e., a positive financial account balance). Alternatively, a deficit on the current and capital accounts implies that the net acquisition of resources from the rest of the world must be paid for by either liquidating foreign assets or increasing liabilities to nonresidents (i.e., a negative financial account balance).

C. Nexus Between the Current Account and Integrated International Investment Position

19.13a The accounting identity between the current account and capital account balances in relation to the IIP can be derived by taking the accumulation accounts of the integrated IIP statement as a starting point. According to paragraphs [2.10] and [9.5] as well as Table [7.1], the change in the net IIP (ΔIIP) between two points in time can be expressed as:

$$\Delta IIP = FAB + VAL + OCV, \quad (14)$$

where

FAB = financial account balance

VAL = net revaluation

OCV = net other changes in volume

Substituting identity (12) in (14),

$$\Delta IIP = CAB + KAB + VAL + OCV \quad (15)$$

That is, the change in the net IIP equals the current account and capital account balances plus revaluation effects and other changes in volume, each of which might take a positive or negative value.⁶



19.13b Explicitly linking net IIP changes to the current account balances offers insights into the dynamics driving IIP developments. It highlights that the size of an

⁶To balance this account in practice, the statistical discrepancy of the BOP must enter equation (12) and consequently equation (15) as an additional term. Equation (15) would thus change into $\Delta IIP = CAB + KAB + VAL + OC + SD$.

economy's net IIP should not be interpreted as an independent investment decision to prefer financial assets abroad over domestic ones. In the long run, the development in an economy's net IIP typically hinges on the economy's current account balance. However, an economy might experience periods in which revaluations and other changes in volume dominate changes in the net IIP. This is particularly the case for economies with large external asset and liability positions and those highly exposed to foreign financial markets and currencies. For example, the net IIP might fall despite a positive current and capital account balance if negative revaluation effects and other changes are larger.

19.13c If an IIP is deemed not to be sustainable,⁷ a persistent increase in the current account balance could bring it back on a sustainable path. Therefore, policy measures must aim at the corresponding current account imbalance as an intermediate target. As discussed in Section F, paragraph [19.43], an economy's response in the face of an unsustainable current account deficit and looming substantially negative net IIP might be a depreciation of the exchange rate of the domestic currency. Such a depreciation may help to lift the balance on the trade in goods and services by encouraging exports and making imports relatively more expensive, thereby increasing the current account balance.⁸ A higher current account balance will result in positive adjustments in the net IIP over time. However, the revaluation effects on the change in the net IIP position must be taken into account as well. Revaluations may support the adjustment or may have adverse effects, depending on the currency composition of the economy's balance sheet. From the domestic economy's perspective, financial assets and liabilities denominated in foreign currency in the IIP gain value after an exchange rate depreciation. If foreign-currency-denominated assets are greater than foreign-currency-denominated liabilities, the net IIP will register a positive revaluation, or vice versa.

⁷One approach to identify an IIP that is not sustainable can be based on the IMF External Balance Assessment Methodology (Allen et al. (2023)), which includes an external sustainability approach.

⁸As pointed out in Section F, paragraph [19.43], how trade flows respond to an economy's exchange rate movements differs and depends on a variety of factors, one of them being the invoicing currency for imports and exports, which might be the domestic currency or a prevailing dominant currency (see, for instance, Adler et al. (2020)).

19.13d On the other hand, the current account balance itself depends partly on the IIP. This feedback loop exists because investment income—being part of the current account—is determined by the size and structure of the existing IIP. The same applies to revaluations and other changes in volume. Their net effect likewise depends on the volume and composition of external assets and liabilities. Thus, equation (15) can be rewritten to differentiate between IIP changes dependent on the current IIP on the one hand, and those independent thereof on the other:

$$\Delta IIP = (CAB - II + KAB) + (II + VAL) + OCV, \quad (16)$$

where



II = investment income balance

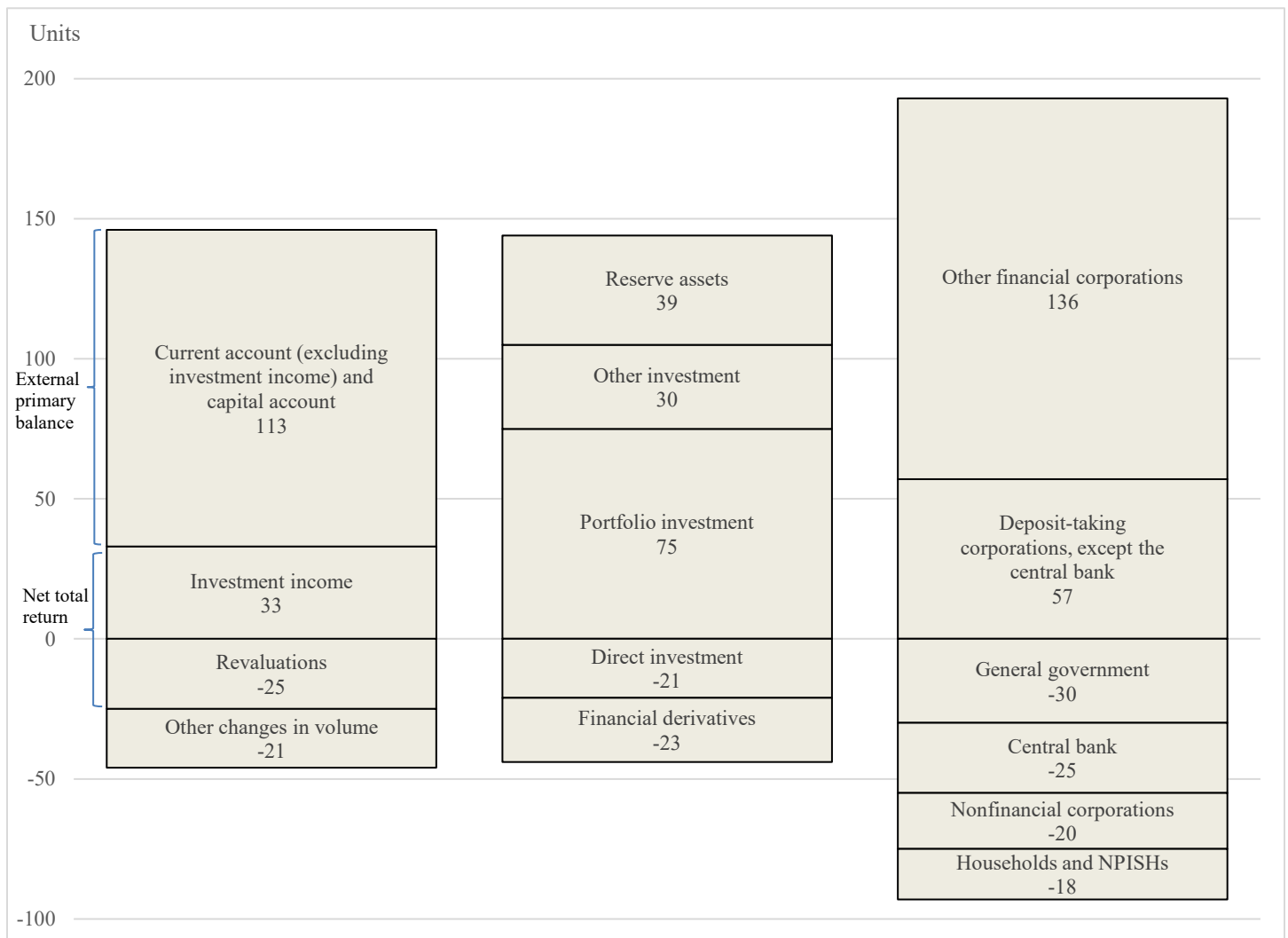
The first term might be labelled external primary balance,⁹ encompassing the capital account balance and the current account balance less investment income. The second term represents the net total return on an economy's net external position. The total rate of return is the sum of the income rate of return and the revaluation rate of return. The income rate of return is the ratio of investment income to the corresponding average asset or liability position in the IIP. The revaluation rate of return is the ratio of revaluations, which are holding gains and losses, to the corresponding average asset or liability position. The nexus between the current account and the IIP is the pivotal point for assessing external sustainability and for calculating rates of return on IIP positions treated in paragraphs [19.35] and [19.XX].

19.13e The change in the net IIP in a given period can be visualized in a three-dimensional accounting system. Each of the three different dimensions captures a specific aspect. The first dimension shows the nexus between the current account and the integrated

⁹ In reference to public finances, where the term “primary balance” is defined as government's net borrowing/lending excluding interest payments.

IIP and breaks down the sources of the change in the net IIP by the components from identity (16). The second dimension, the functional account, shows how the change in the net IIP is reflected in the various functional categories. As the third dimension, the sector account allocates the change to the domestic sectors involved. An example is provided in Figure 19.1.

Figure 19.1. Three-Dimensional Account System Presenting Changes in the net IIP



Note: In this example, the change in the net IIP is 100 as illustrated for all three accounts.

D. Alternative Presentations of Balance of Payments Data

19.14 The different presentations discussed below can be used to highlight different aspects of BOP financing and its effect on the economy. These presentations involve reorganization of the items to emphasize particular aspects.

1. Standard presentation

19.15 The tables presented in Chapters 2 and 7–14 use a standard presentation that groups economic processes and phenomena, consistent with the *SNA* and other macroeconomic statistics. It features two major lines for balances:

- (a) between current account credits/revenues and debits/expenditures—the balancing item is the current account balance, and
- (b) between financial and nonfinancial entries—the balancing item is net lending/net borrowing.

In addition, there are a range of other balancing items shown in Table [2.1] and Chapters 7–14 that highlight different components.

2. “Analytic” presentation

19.16 The analytic presentation is a reorganization of the standard presentation of balance of payments statistics to facilitate a basic distinction between (a) reserves and closely related items and (b) other transactions. The analytic presentation is an example of a thematic table and is designed to focus on management of reserves and closely related items, but the term “analytic” should not be taken to suggest that this presentation is

suitable for all analytical purposes or that other presentations are not useful for other kinds of analysis. Table 19.1 illustrates this presentation. It draws the line between the ways monetary authorities finance transactions (below the line) and other items (above the line).

19.17 This presentation shows how reserves, along with the related items of IMF credit and loans, and exceptional financing (such as accumulation of arrears, debt forgiveness, intergovernmental grants, and debt restructuring) are used to finance other “autonomous” international transactions. Exceptional financing is discussed in detail in Annex 1. The presentation is useful for monetary authorities that use intervention, including managed exchange rate regimes, with various degrees of flexibility. Arrears related to exceptional financing are recorded below the line as transactions in the analytical presentation with the corresponding entry in the relevant instrument. (This treatment is because, although the accumulation of arrears is not a transaction, it results from the actions of the monetary authorities.) Categories of the BOP above-the-line from which transactions could be taken to below-the-line are marked as “(n.i.e.)”

Table 19.1. “Analytic” Presentation of the Balance of Payments¹


| | Credits | Debits |
|-----------------------------------|---------|--------|
| | | |
| Current account n.i.e. | | |
| Goods | | |
| Services | | |
| Earned income | | |
| Transfer income n.i.e. | | |
| Balance on current account n.i.e. | | |
| | | |
| Capital account n.i.e. | | |
| Balance on capital account n.i.e. | | |

| | | |
|--|--|--|
| | | |
| Financial account n.i.e. | | |
| Direct investment n.i.e. | | |
| Portfolio investment n.i.e. | | |
| Financial derivatives and ESOs n.i.e. | | |
| Other investment n.i.e. | | |
| Balance on financial account n.i.e. | | |
| | | |
| Balance on current, capital, and financial accounts n.i.e. | | |
| | | |
| Reserves and related items | | |
| Reserve assets | | |
| IMF credit and loans | | |
| Exceptional financing | | |
| Total reserves and related items | | |

¹Exceptional financing items are moved from the current, capital, and financial accounts to the reserves and related items heading. for this reason, other items are stated as being n.i.e. (exceptional financing is discussed in Annex 1.) Since the table covers a mix of transactions in the current, capital, and financial accounts, the column headings reflect the underlying double-entry basis of BOP statistics (credit/debit) as explained in Box 2.1 rather than the *Manual* standard headings credit/revenue, debit/expenditure, net acquisition of financial assets, and net incurrence of liabilities.

3. Sectoral analysis

19.18 Another analytical presentation groups items in the financial account by the type of resident recipient of external financing—for example, central bank, deposit-taking corporations except the central bank, general government. To support this approach, sectoral splits are required for all financial account items.

 **19.19** Sectoral presentations provide a convenient way to analyze the net foreign lending or borrowing of each domestic sector. These data help identify issues of sustainability and vulnerability. Sectoral analysis is developed in conjunction with the balance sheets (see paragraphs [19.57–19.66]) and in the presentation of external debt statistics (see *External Debt Statistics: Guide for Compilers and Users*).

4. Monetary presentation

Reference:

Aguilar, Carmen Picón, Rodrigo Oliveira Soares, and Ramón Adalid, *Revisiting the Monetary Presentation of the Euro Area Balance of Payments*, European Central Bank Occasional Paper No. 238 (February 2020).

19.20 The monetary presentation explicitly shows the link between the BOP and monetary and financial statistics (as mentioned in paragraph [2.8]). It identifies the transactions of the deposit-taking corporations (plus money market funds, if their liabilities are included in the definition of broad money), which are equal to the foreign assets and liabilities of the same entities, as recorded in monetary and financial statistics.

19.21 This presentation highlights the effects of international transactions on monetary developments. This may be summarized by the following equations:

- (a) The transactions derived from the balance sheet of deposit-taking corporations (and money market funds, where relevant) can be expressed as follows:

$$NFA + DDC - DM + OTR = 0, \quad (17)$$

where

$$NFA =$$

net transactions in foreign assets and liabilities of the deposit-taking corporations

$$DC = \text{domestic credit}$$

$$M = \text{broad money (liabilities)}$$

$$OTR = \text{other (net) transactions vis-à-vis residents}$$

D = transactions derived from corresponding positions (i.e., excluding any changes due to revaluation or other changes in volume)

- (b) The identification of transactions by deposit-taking corporations in the BOP leads to the following equation:

$$NFA + ETN = 0, \quad (18)$$

where

ETN = nonfinancial BOP transactions and transactions in foreign assets and liabilities by sectors other than deposit-taking corporations¹¹

- (c) Combining these equations makes explicit the link between developments in broad money and the BOP transactions of the sectors other than deposit-taking corporations:

¹¹Under this type of analysis, if deposit-taking corporations transact in foreign assets with other resident sectors, for the identities to hold, transactions in both NFA and ETN need to be recorded, even those that are resident-to-resident, and therefore not BOP, transactions. As noted in paragraph [3.8], in practice BOP transactions in financial assets may be derived from data that do not distinguish whether the counterparty is a resident or a nonresident.

$$DM = -ETN + DDC + OTR. \quad (19)$$

19.22 This presentation highlights the effect of international transactions on domestic liquidity. It emphasizes the links between BOP and monetary statistics.

5. Partner analysis

19.23 Data by partner economy can assist in the conduct of international trade negotiations. They are also useful in identifying potential vulnerability from excessive reliance on another economy, and in forecasting and analyzing contagion effects. They can be used to monitor data quality, through the study of comparison of bilateral data as reported by each of the partner economies (see, for example, the Bureau of Economic Analysis and Eurostat's study of asymmetries in US-EU current account data, cited at the end of this chapter). Such analysis reflects developments such as the need to monitor large payments imbalances between and among certain individual economies and groups of economies, and the analytical interest in the source of BOP flows and positions for economies.

19.24 For analysis of IIP by partner, assets are shown according to the residence of the debtor (or issuers of nondebt instruments), and liabilities according to the residence of the creditor (or holders of nondebt instruments). For analysis of BOP transactions by partner, data both on a debtor-creditor and a transactor basis may be of interest.¹² The debtor-creditor basis facilitates analyses concerned with such issues as whose securities are being purchased and sold. The transactor basis allows for analysis of where residents engage in financial asset transactions with nonresidents, changes in relative importance and growth of international financial centers, and so forth.

¹²The debtor/creditor and the transactor bases differ in the case of secondary market transactions and are discussed in paragraph [4.154].

E. Financing a Current Account Deficit

19.25 This section examines the financing of a current account deficit by means of net financial inflows, including reserve asset transactions, and some of the economic policy issues involved. For such an analysis, it would be helpful to use identity (12), and to assume that initially $S=I$ (i.e., that the current account is in balance and that net capital and financial account balances, including reserve asset transactions, are also zero). From this initial situation, it is instructive to trace the effects, on the current account and the financial account, of an autonomous increase in investment (capital formation), which is generated by a rise in the productivity of capital. If this additional investment is not matched by a corresponding rise in saving, interest rates will tend to rise as long as the monetary authorities do not “control” the rates. The excess of investment over saving will be reflected in a current account deficit, which may be financed by a net financial inflow.

19.26 Whether there is spontaneous financing of a current account deficit—that is, whether the gap between saving and investment is met from autonomous flows—depends on a number of considerations. The functional categories of the external accounts, as well as additional breakdowns (e.g., domestic sector, partner economy, currency of denomination), can be crucial to assess the determinants of such financing, and therefore the appropriate policy measures to foster the most appropriate and sustainable financing sources. In particular, direct investment is frequently characterized by stable and long-lasting economic links, as well as the provision of technology and management. The financial inflow may be directly related to increased capital formation as a result of direct investment, loans obtained from foreign banks, or bonds issued in international financial markets. The foreign financing can be for the purchase of imported goods and services required for an investment project and for the purchase of domestic inputs. Alternatively, additional investment may be financed domestically by means of bank loans or issues of

equities and bonds. In this case, there is no direct link between increased domestic expenditures and foreign financing. However, the tendency for domestic interest rates to rise (in comparison with rates abroad) because of the increased investment will provide an incentive for funds to flow into the economy. Whether or not funds do so depends largely on how investors view the economic prospects of the economy. The prevalence of stable economic and political conditions—particularly if it is not likely that the higher interest rate will be offset by a continuing depreciation of the exchange rate of the economy—will increase the spontaneous movement of funds into the economy.

19.27 The financial inflow associated with the excess of investment over saving involves a reduction in the net foreign asset position of the economy and the reduction, in turn, will change the net investment income flow of the economy. The key analytical issue is whether the economy will be able to service the change in the net foreign investment position without undertaking significant modifications in economic policies or without incurring undesirable changes in interest rates or exchange rates. Servicing is likely to occur without changes if the investment makes a significant contribution to the productivity of the economy. Such a contribution can be manifested in two ways: first, the firm or government enterprise undertaking the investment must be sufficiently profitable to pay the rate of return that will attract the funds to finance the investment; second, the additional investment must enhance the debt-servicing capacity of the economy. As long as funds from abroad are invested productively, external financing for a current account deficit is likely to be forthcoming for a considerable period of time. In this situation, the finance-receiving economy's current account deficit manifests an efficient allocation of resources.

19.28 Alternatively, it is useful to consider a case in which investment is unchanged but saving declines—for example, because of an increase in government spending not matched by a rise in tax and other revenue or because of an increase in private consumption not matched by an offsetting change in government saving. In this situation, domestic interest

rates would also tend to rise. However, unlike the previous case, the shift to a current account deficit is not paralleled by an increase in productivity in the economy. Under these conditions, there may not be a sustained spontaneous inflow of funds if investors view the decline in the current account as reflecting inappropriate and unsustainable government policies. For example, the decline in saving may reflect an enlarged public sector deficit that is not associated with increased investment. Alternatively, the rise in absorption may be due to higher private spending generated by an expansionary monetary policy. Under these circumstances, investors may not wish to increase their net claims on the economy.

19.29 In the absence of a spontaneous financial inflow, some combination of the following will be necessary: policy actions to attract private funds, the use of reserve assets for BOP financing, and the implementation of BOP adjustment measures. From identity (12), it can be seen that, if the current account shifts into deficit, financing must take place either by drawing down the economy's reserve assets or by increasing incentives for attracting private funds. The latter can be achieved by enhancing the domestic economic environment for long-term investment. The adoption of monetary and fiscal policies that support stable economic conditions and encourage direct and other investment would tend to induce financial inflows on a sustained basis. Funds may also be induced to flow in from abroad—and to provide BOP financing—by the raising of domestic monetary policy interest rates. Such a policy may well be appropriate if the current account deficit is caused by aggregate demand pressures; a restrictive monetary policy would have the effect of dampening excess demand and providing short-term financing. However, such financing may not be dependable from a long-term perspective as, for example, changes in foreign monetary conditions may make investment of liquid assets in the domestic economy appear unattractive. Therefore, it is necessary to look at the underlying causes of a current account deficit.

19.30 The appropriateness of using reserve assets to finance a gap between domestic expenditure and revenue, rather than undertaking adjustment measures to reduce or eliminate this gap, depends on the extent to which the gap is temporary or reversible. As an economy's stock of reserve assets (as well as the resources it can borrow to supplement its reserve assets) is limited, the use of reserve assets to finance a current account deficit is confined within these limits. However, by mitigating the necessity for BOP adjustment, official financing can perform a useful buffer function. For example, temporary shocks, such as poor harvests or other temporary supply disruptions, to domestic output do not necessarily require comparable changes in the domestic absorption of goods and services. Thus, the financing, through the use of reserve assets, of a temporary excess of consumption and investment over national income can provide a desirable smoothing of the path of expenditures by residents. The reserve assets can also be used to finance seasonal swings in foreign payments and receipts. While the financing of temporary shocks is appropriate, recourse to owned or borrowed reserve assets does not obviate the necessity for adjustment if the decline in the current account persists—although it can make the adjustment path smoother and more gradual.

19.31 There are limits to the extent to which private funds and official resources can finance a current account deficit. The willingness of the private sector to invest in the economy may be directly influenced by ongoing changes in reserve assets. If the existing stock of reserve assets is relatively low in comparison with the current account deficit and the monetary authorities are expected to exhaust the economy's reserve assets within the investment horizon of the investors, then the probability of a depreciation of the exchange rate or the introduction of other policy measures adversely affecting the rate of return expected by investors would tend to increase significantly. Under these circumstances, any private funds from abroad that are financing all or part of a current account deficit could quickly switch from a net inflow to a net outflow. As can be seen from identity (13), unless

adjustment measures are implemented to reverse both the current account deficit and the financial account outflow, reserve assets would be required to finance both an excess of domestic investment over saving and a net increase in liabilities to nonresidents. Such a situation would probably result in a loss of confidence in the currency, exacerbation of the financial outflow, and a rapid exhaustion of reserve assets.

19.32 More generally, in a world of high financial mobility, external and domestic private sector willingness to provide financing are influenced by a complex set of expectations about future economic, political, and other developments in the recipient economy and in the rest of the world. Changes in these expectations may result in rapid rebalancing of the composition of balance sheets and cause high volatility in financial flows with significant current account and other macroeconomic implications. Section G provides more extended discussion.

19.33 The previously described framework for analysis of the BOP is applicable, irrespective of the exchange rate regime adopted by an economy. For example, if the exchange rate is pegged, then transactions in reserve assets will be determined by the net demand or supply of foreign exchange at that exchange rate (i.e., from identity (13), $BRT = CAB - FKB$). At the other extreme, if the exchange rate arrangement involves a pure float so that no exchange market intervention takes place, then $CAB = FKB$. In the intermediate case of a managed float, purchases and sales of reserve assets are typically undertaken to achieve a desired exchange rate path for the domestic currency in terms of one or more foreign currencies.

19.34 Financial account transactions, as included in the FKB term in identity (13), can be analyzed in terms of their composition. Direct investment, portfolio investment, financial derivatives, and other investment can have different implications for the economy, in terms of factors such as volatility, future returns, and effect on capital formation. More

detailed data on instruments and maturity are also relevant to understanding the nature of the financing and its future effects.

19.35 There is another connection between the financial account and the current account as described in paragraph [19.13d]. Financial flows generate changes in foreign claims and liabilities. In nearly all cases, these financial stocks earn returns (interest, dividends, or reinvested earnings) that appear in the current account as investment income. The rate of these returns can differ between assets and liabilities and between different types of investment. This link between the accounts is particularly relevant in the case of an economy running a current account deficit because there is an important dynamic relationship between an existing deficit and the future current account balance. A deficit in the current account must be financed by some combination of an increase in liabilities to nonresidents and a reduction in claims on nonresidents so that the net result is a decline in net foreign assets. As a consequence, there will be a reduction in net investment income (unless rates of return adjust in an offsetting manner), and this reduction will increase the current account deficit. This interaction between the current account and the financial account can lead to a destabilizing situation in which the current account balance progressively worsens unless changes in economic policies or adjustments in certain variables (e.g., exchange rates) are made to arrest the deterioration.

19.36 In analyzing the BOP and, in particular, the sustainability of any specific current account situation, it is important to consider the determinants of financial flows. These relate mainly to factors affecting the rate of return and risk on foreign and domestic assets. Such factors include interest rates, the profitability of direct and other investments, expected changes in exchange rates, and tax considerations. These factors are embodied in the expected real (i.e., adjusted for exchange rates and inflation) after-tax rate of return on the stock of foreign assets held by residents and on the stock of claims held by nonresidents. Residents and nonresidents are subject to different legal and tax considerations, which affect

the rates of return on asset holdings. However, both are similarly affected by economic conditions external to the economies in which they are resident. Moreover, these external conditions are exogenous to an individual economy.

19.37 Indeed, whereas in circumstances of low financial mobility and mostly official financing it could be reasonable to focus mostly on domestic conditions, in a world of high financial mobility, external conditions—such as changing world interest rates—are important factors in influencing financial flows.

19.38 BOP statistics use the accrual principle, which reflects underlying resource flows. However, a payments crisis is usually driven by cash flows. It may therefore be useful to consider cash flow dimensions when there are significant timing differences between payments and resource flows, for example, in the cases of accrual of interest, reinvested earnings, and nonperforming loans.

F. Balance of Payments Adjustment in Response to a Current Account Deficit

19.39 There are many situations in which it may not be feasible to rely on private and official resources to finance a current account deficit on a sustained basis. If a deficit is unsustainable, the adjustment will necessarily happen through change in the willingness of market participants to provide financing or depletion of reserves and other financial assets, or a combination of both. Such adjustments may be abrupt and painful (up to the possibility of a BOP crisis that involves a shortage of reserves to cover BOP needs). Therefore, policy measures aimed at mitigating the adjustment path may need to be considered.

19.40 For BOP analysis, it is therefore important to consider the possible introduction of adjustment measures to achieve a viable external payments position (i.e.,

conditions under which a deficit on goods, services, and income can be financed by private and official transfers, private financial inflows, and some recourse to reserve and other financial assets). The subsequent discussion illustrates some possible measures, but it is not exhaustive. It examines briefly the roles of exchange rate changes, fiscal measures, and monetary policy in achieving BOP adjustment.

19.41 In this analysis, it may be useful to rewrite identity (9) as:

$$\begin{aligned} S - I &= CAB \\ &= BTG + BTS + BEI + BTI \\ &= FKB + BRT \quad (17) \end{aligned}$$

where

BTG = balance on trade in goods

BTS = balance on trade in services

BEI = balance on earned income

BTI = balance on transfer income

The magnitude of the necessary adjustment in the BOP depends, to some extent, on the nature of the components of the current account balance. For example, an economy may have been running a persistent deficit on trade in goods that was financed, in part, by borrowing from private and official sources. In this situation, the economy is also likely to be running a deficit on the balance of earned income that reflects the servicing of this debt. A deficit for goods, services, and earned income may, however, be offset by a surplus on transfer income, which could reflect both official and private current transfers. If such inward transfers are expected to be of a long-term nature and can confidently be relied upon to finance all or part

of the deficit in other components of the current account, then the extent of the necessary balance of payments adjustment may be rather small.

19.42 However, even in the case of a small adjustment, it is nonetheless important to be fully cognizant of the fact that foreign debt must be repaid. Thus, the amortization schedule of the economy is an important factor for judging the sustainability of a particular BOP situation. If large amortization payments are due in the near future and expected financial inflows are not sufficient to cover payments falling due, it may be necessary to undertake adjustment measures beforehand to avoid more drastic measures required for dealing with a subsequent BOP crisis.

19.43 In the face of an unsustainable current account deficit in an economy with a fixed or managed exchange rate, one adjustment measure that could be considered is a depreciation of the exchange rate of the domestic currency.¹³ Such a depreciation may be necessary to offset a domestic price rise (relative to prices abroad) that—by penalizing exports and encouraging imports—worsens the balance on trade in goods. To the extent that the depreciation raises the prices of traded goods and services (i.e., exports and imports) in comparison with the prices of nontraded goods and services, depreciation will promote the substitution of domestic for imported products and stimulate foreign demand for domestic products. However, because the depreciation will be accompanied by a rise in domestic prices in response to the increase in the cost of imported goods and services and the rise in demand for exports and domestically produced import substitutes, the improvement in international competitiveness generated by the exchange rate change will be partially or fully eroded. Such a development underscores the importance of supplementing the exchange rate adjustment with restrictive monetary and fiscal policies to facilitate the shift in resources signaled by the change (caused by the depreciation) in relative prices. Thus, an expenditure-

¹³The application of such a depreciation may be complicated by significant currency balance sheet mismatches, which need to be taken into account. These mismatches are discussed in Section H.

switching policy in the form of exchange rate depreciation must generally be supported by expenditure-reducing measures; indeed, such measures are essential if there is no excess capacity in the economy.

19.44 The effects of such action can be seen from identity (9), which shows that any improvement in the current account must be matched by a corresponding positive change in the difference between saving and investment. An exchange rate depreciation by itself may generate such a change in the desired direction. In particular, if there is no change in the stance of monetary policy, the increase in demand generated by the depreciation will raise the demand for money. With an unchanged money supply, the greater demand for money will tend to increase nominal and real domestic interest rates. As a result, interest-sensitive expenditures will be dampened, and there could be a positive impact on saving. However, it is unlikely that this induced effect on the gap between saving and investment will itself be sufficient, particularly if the economy is at full employment, to achieve the desired improvement in the current account. Therefore, in all likelihood, it will be necessary to accompany the adjustment in the exchange rate with measures to reduce the level of domestic expenditure through tighter monetary and fiscal policies that release resources to expand output in the exporting and import-substitution industries.

19.45 The discussion of identity (11) pointed to fiscal deficits as one potential cause of external imbalances. Changes in government spending and taxation may therefore be necessary to achieve the required reduction in the saving-investment gap—to the extent that an exchange rate depreciation does not induce a sufficient response in the difference between total saving and investment. However, it is important that fiscal policy measures be designed to achieve the desired objective and not exacerbate the adjustment problem. For example, cuts in infrastructure investment may have the desired short-run BOP effect, but such cuts could have, particularly if the spending reductions are in such areas as

transport or electricity, a long-run adverse impact on the supply potential of the economy and the generation and supply of energy designed to relieve bottlenecks. Moreover, tax measures that result in very high marginal tax rates or that are aimed particularly at investment income could have the undesired side effect of inducing offsetting reductions in private saving and reducing incentives to invest in the economy. Such disincentive effects can be avoided by implementing fiscal action aimed at reducing or eliminating subsidies and by cutting back on government activity that can be performed better by the private sector.

19.46 The stance of monetary policy plays an important role in BOP adjustment. The existing external imbalance may reflect an excess of domestic investment over saving (or what is the same thing—an excess of domestic spending over income) that results from an excessively expansionary monetary policy. It is, first of all, important to adjust the stance of monetary policy so that interest rates are generally positive in real terms and provide an incentive to savers and so that domestic economic conditions are sufficiently stable to encourage investment. From the perspective of aggregate supply and demand, it can be seen from identity (5) that monetary policy should ensure that the level of domestic expenditure is in line with the productive capacity of the economy. Thus, from the point of view of BOP analysis, the objective of monetary and fiscal policies is to limit domestic spending to what is available from domestic resources and foreign financing.

19.47 One important aspect of monetary policy in BOP adjustment is the link between reserve asset transactions and domestic monetary conditions. A decline in reserve assets may be associated with a current account deficit or a net financial outflow caused by an expansionary monetary policy or both. The reserve asset decline can lead to a reduction in the monetary base and therefore to a tightening in the stance of monetary policy. A more restrictive monetary policy tends to correct the payments imbalance through higher interest

rates that dampen domestic demand and make domestic assets more attractive to investors. However, this built-in adjustment mechanism can be short-circuited if the monetary authorities offset the effect of the loss of reserve assets on the monetary base by increasing the domestic component of the base (e.g., through open-market purchases of securities held by the banking system). Such offsetting action tends to prevent domestic interest rates from rising and thereby contributes to the persistence of the balance of payments deficit.

G. Implications of a Current Account Surplus

19.48 The foregoing discussion focuses entirely on an economy that faces an actual or incipient BOP problem in the form of a persistent current account deficit. Of course, for the world as a whole, the current account deficits of economies in deficit are exactly offset by the surpluses of other economies.¹⁴ Although surpluses typically do not lead to crises in the economies that run them, an analysis of some aspects of a surplus BOP situation is useful as surpluses may raise important issues associated with domestic monetary management and vulnerabilities and the speed of adjustment toward more balanced external accounts. As can be seen from identity (13), a surplus in the current account is reflected in an increase in net claims held by the private sector or government (FKB) on nonresidents or an increase in official reserve assets (BRT), or both.¹⁵ The change in the net foreign asset position may be due to a reduction in liabilities to nonresidents rather than to an increase in gross claims. Such a reduction may well be a desirable development if a previous large buildup of liabilities has imposed a severe debt service burden on the

¹⁴In practice, owing to measurement problems, the sum of the balances of all economies deviate from zero. Most issues of the *Annual Report* of the IMF Committee on Balance of Payments Statistics focus on the latest developments in terms of global imbalances.

¹⁵Assuming that the transactions are not offset by revaluations or other changes in the volume of financial assets and liabilities.

economy. In this case, a current account surplus can be an appropriate step toward achieving a viable BOP.

19.49 The case of an economy with no recent current account deficits and an increase in its gross private claims on the rest of the world reflects an excess of aggregate saving over domestic investment. If the government's fiscal balance is in deficit, private sector saving will exceed domestic investment. The allocation of part of saving to foreign assets presumably reflects the fact that investors find the rate of return on these assets more attractive, at the margin, than investment opportunities in the domestic economy. The provision of resources to the rest of the world in the form of a buildup of net claims on nonresidents will, by and large, result in an efficient allocation of the domestic economy's saving as long as the buildup of net claims reflects the operation of market forces rather than government policies designed directly or indirectly to increase such claims.

19.50 Thus, for analyzing the BOP of an economy in persistent surplus, one key consideration is whether government policies distort saving and investment decisions and thereby bias an economy toward a current account surplus. Such distortions can take many forms. First, there are measures that directly influence the current account. Examples are tariffs and quotas that limit imports, restrictions on payments abroad, and export subsidies and government procurement policies that give preference to domestic producers. Moreover, an exchange market intervention policy may bias the value of the currency downward. Finally, there may be measures that limit foreign acquisition of domestic assets—a limitation that would tend to bias the financial account toward a net outflow and thereby shift the current account in the direction of a surplus.

19.51 These measures may, in fact, not lead to a larger current account surplus. Policy actions aimed at particular components of the BOP will, over time, lead to offsetting movements in other components in the absence of changes in the underlying determinants of saving and investment. In any event, if a large and persistent current account surplus appears to

arise from such distortionary measures, the appropriate policy action is the reduction and eventual removal of these distortions. If a persistent surplus remains after such measures are eliminated, then the accumulation of net claims on the rest of the world would appear to manifest the saving and investment propensities of the economy. If, in this case, one were to identify the surplus as a problem, it would generally be necessary to establish that private saving or government saving was excessively high or that domestic investment was too low. It is considerably more difficult to arrive at such a conclusion than to identify the previously enumerated distortions that relate directly to international transactions.

19.52 A current account surplus, while reflecting entirely a response to market forces, may cause economic difficulties for an economy. For example, an economy with a “resource curse” experiences either a natural resource discovery or a substantial improvement in the terms of trade for the natural resources sector. The expanding sector or terms of trade gains lead to an improvement in the current account and an appreciation of the exchange rate. This development tends to make other sectors of the economy contract and be less competitive internationally. If the newly discovered resources are expected to be depleted fairly rapidly and the gains in terms of trade to be transitory, it may be appropriate to protect the sectors adversely affected. One way to achieve this objective is through exchange market intervention to prevent or moderate the exchange rate appreciation. The accumulation of reserve assets or special funds tends to insulate the real economy from having to adjust to the short-run disturbance.

19.53 Current account surpluses may also create other difficulties in the domestic economy, such as difficulties in monetary management and increases in vulnerabilities associated with large and rapid monetary expansions. When a current account surplus causes an increase in reserve assets, the economy’s monetary aggregates expand and a credit expansion will tend to take place. If this credit expansion is too large and rapid, the economy may overheat (leading to inflationary pressures) or vulnerabilities in the financial

sector may emerge, particularly if there are weaknesses in financial sector supervision. Sterilization of the buildup in reserves—that is, offsetting its monetary impact through, typically, sales of domestic securities—can help mitigate this effect, but not forever, and often at significant cost. These costs typically arise because the domestic securities will carry a higher interest rate than the (usually low) rate received by the monetary authorities for their reserves. Moreover, if the currency were to appreciate in the future, the monetary authority would experience a decline in net worth, because the value of the reserves would fall relative to the value of the domestic securities used for the sterilization operations.

19.54 When a current account surplus is not the result of government policy actions, it may be difficult to establish that an economy is investing too much of its saving abroad and whether, therefore, specific policy changes are needed when an economy is facing a current account surplus. Some guidance may be obtained, however, from the behavior of reserve assets. When a current account surplus is reflected in a buildup of foreign reserve assets rather than in a rise in net foreign assets held by the private sector, the buildup represents specific government policy action in the form of foreign exchange market intervention. Intervention, which involves the sale of domestic currency in exchange for foreign currency, has the tendency to keep the foreign exchange value of the domestic currency lower than it otherwise would be. The accumulation of reserve assets may therefore limit the extent to which the currency appreciates and—particularly when accompanied by sterilization—prevent the operation of the self-correcting mechanism that would tend to reduce the current account surplus.

19.55 Thus, one aspect of BOP analysis for an economy with a persistent current account surplus involves an appraisal of the level of reserve assets held by monetary authorities. The accumulation of such assets is excessive if the assets exceed, by a wide margin, the amount required to finance possible future short-run deficits. In such a situation, the economy's resources may well be more efficiently used if devoted to domestic

consumption or capital formation rather than financing demand in other economies. If the private and government sectors are unlikely to increase domestic capital formation, cessation of reserve asset accumulation would lead to an increase in domestic absorption or to a rise in net foreign investment by residents or both.¹⁶ In either case, allocation of the economy's resources would tend to be more efficient as the allocation would be responding to market forces.

19.56 As in the case of an economy exhibiting a current account deficit, monetary, fiscal, and exchange rate policies have an important role in the adjustment of an economy with a current account surplus. In principle, the surplus could be reduced through expenditure-expanding policies (e.g., expansionary fiscal and monetary policies) or through expenditure-switching policies that would drive consumption toward foreign goods and away from domestic goods (e.g., a currency appreciation). Nevertheless, expansionary fiscal and monetary policies could have the unwanted implication of fueling the credit boom, which would cause increased inflationary pressures and possibly heighten credit-related vulnerabilities. A currency appreciation would, on the contrary, moderate the credit expansion by increasing consumers' purchasing power in terms of foreign goods (which would drive demand toward the consumption of foreign goods), and by limiting the creation of new base money (because the monetary authority would be limiting its intervention in the foreign exchange market). Given that the currency appreciation would also make domestic goods less attractive abroad, a gradual appreciation process may be needed in order to achieve a smooth adjustment of the external accounts.

¹⁶Economies that are large exporters of nonrenewable resources, such as oil, may have limited domestic investment opportunities. In such cases, the buildup of foreign assets can be viewed not so much as an accumulation of reserve assets for BOP financing purposes but rather as a diversification of the economy's stock of wealth. Also, there may be a case for the accumulation of reserve assets in the instance of an economy subject to resource curse if the effects are expected to be transitory.

H. The Balance Sheet Approach

References:

M. Allen, C. Rosenberg, C. Keller, B. Setser, and N. Roubini, *A Balance Sheet Approach to Financial Crisis*, IMF Working Paper (WP/02/210).

J. Mathisen and A. Pellechio, *Using the Balance Sheet Approach in Surveillance: Framework, Data Sources, and Data Availability*, IMF Working Paper (WP/06/100).

IMF and others, *External Debt Statistics: Guide for Compilers and Users*; Part III, Use of External Debt Statistics.

19.57 As financial markets in many economies have become increasingly integrated with global markets, foreign borrowing has helped finance higher levels of investment than would be possible with saving by residents alone and contributed to sustained periods of growth. But the opening of financial markets has revealed that private financial flows are sensitive to market conditions, perceived policy weaknesses, and negative shocks. Flows of private finance have been volatile with some economies experiencing financial crises.

19.58 The financial structure of economies—the composition and size of the liabilities and assets on the economy’s financial balance sheet—has been an important source of vulnerability to crises. Financial weaknesses, such as a high level of short-term debt, can be a trigger for domestic and external investors to reassess their willingness to finance an economy. The composition of the IIP also helps indicate the vulnerability of the economy to changes in external market conditions. The implications for vulnerability differ among different functional categories and instruments. In the case of direct investment liabilities and portfolio investment equity, the return to the creditor depends on the performance of the issuer. In contrast, in the case of debt liabilities other than for direct

investment, the return to the creditor is usually not dependent on the performance of the debtor, so the economy of the debtor has a greater risk exposure, in that payments are required to be made even if the debtor faces difficult circumstances.

19.59 The balance sheet approach provides a systematic analytical framework for exploring how balance sheet weaknesses contribute to macrofinancial vulnerabilities, including the origin and propagation of modern-day financial crises. It draws on the body of academic work that emphasizes the importance of balance sheets. It pays particular attention to the balance sheets of key sectors of the economy and explores how weaknesses in one sector can cascade and ultimately generate a broader crisis. It is built on the use of harmonized classifications and definitions in different types of economic statistics, so that data can be aggregated and compared. For external accounts compilation, the balance sheet approach requires that institutional sector classifications and the level of detail should match those used for monetary, financial, and government finance statistics.

19.60 Unlike traditional analysis, which is based on the examination of flow variables (such as current account and fiscal balance), the balance sheet approach focuses on the examination of stock variables in an economy's sectoral balance sheets. The economy's aggregate external balance sheet—the external assets and liabilities of all sectors of the economy—is vital. The net IIP at the end of a specific period reflects not only financial flows but also valuation changes and other adjustments during the period, all of which affect the current value of an economy's total claims on nonresidents and total liabilities to nonresidents.

19.61 Indeed, as the financial assets and liabilities of domestic sectors cancel each other out, an economy's consolidated balance sheet consists of its stock of domestic nonfinancial assets plus its net IIP. But the balance sheet approach emphasizes that it is often equally important to look inside an economy and to examine the balance sheet of an

economy's key sectors, such as general government, the financial sector, and the nonfinancial corporations sector. The balance sheet of the national accounts includes data for all sectors.

19.62 The sources of financial vulnerability are varied: creditors may lose confidence in an economy's ability to earn foreign exchange to service the external debt; in the government's ability to service its debt; in the banking system's ability to meet deposit outflows; or in corporations' ability to repay bank loans and other debt. An entire sector may be unable to attract new financing or roll over existing short-term liabilities. It must then either find the resources to pay off its debts or seek a restructuring.

19.63 To support this analysis, the framework for assessing balance sheet risks focuses on five types of balance sheet mismatches, all of which help to determine an economy's ability to service debt in the face of shocks:

- (a) Maturity mismatches, where a gap between liabilities due in the short term and liquid assets leaves an institutional sector unable to honor its contractual commitments if creditors decline to roll over debt. They also expose the sector to the risk that interest rates will rise;
- (b) Currency mismatches, where, if unhedged, a change in the exchange rate leads to a holding loss;
- (c) Financial structure problems, where a heavy reliance on debt rather than equity financing leaves a firm or bank less able to weather revenue shocks;

- (d) Solvency problems, where assets—including the present value of future revenue streams—are insufficient to cover nonequity liabilities, including contingent liabilities;¹⁷ and
- (e) Dependency problems. IIP by partner economy (and also BOP by partner) can help identify overreliance on another economy, and hence potential vulnerability and contagion concerns.

Additional items on the currency composition and residual maturity of debt liabilities are designed to support analysis of these issues. Analysis should also take into account hedging strategy; for example, currency or interest rate exposure may be hedged, or unhedged financial derivatives exposure may imply much greater vulnerability to changes than the value of the derivatives suggests. Maturity mismatches, currency mismatches, and a poor financial structure all can contribute to solvency risk, but solvency risk can also arise from simply borrowing too much or from investing in low-yielding assets.

19.64 Composition of the IIP sheds light on the dynamics. For example, if assets are largely denominated in foreign currency and liabilities are largely denominated in domestic currency, a depreciation (an appreciation) of the domestic currency will have positive (negative) wealth effects. Currency depreciations (appreciations) usually have expansionary (contractionary) impact on production via the improvement of net exports and a contractionary (expansionary) impact on domestic consumption. The wealth effect associated with the currency composition of foreign assets and liabilities may dampen the impact of a depreciation (appreciation) on domestic consumption. On the contrary, when assets are denominated in the domestic currency and liabilities in a foreign currency the

¹⁷The interpretation of loan asset values is enhanced by taking into account additional information on fair values and nonperforming loans.

wealth effect associated with a currency change will reinforce the impact of a depreciation (appreciation) on domestic consumption.

19.65 Further, debts among residents that create internal balance sheet mismatches also generate vulnerability to an external BOP crisis. The transmission mechanism often works through the domestic banking system. For instance, broad concerns about the government's ability to service its debt, whether denominated in domestic or foreign currency, will quickly destabilize confidence in the banks holding this debt and may lead to a deposit run. Alternatively, a change in the exchange rate coupled with unhedged foreign exchange exposure in the nonfinancial corporations sector can undermine confidence in the banks that have lent to that sector. The run on the banking system can take the form of a withdrawal of cross-border lending by nonresident creditors, or the withdrawal of deposits by domestic residents. Indeed, if the latter results in an increased demand for foreign currency or other foreign assets by domestic residents, this could lead to financial outflows, loss of reserves, or a combination of both.

19.66 Many of the characteristics of a financial account crisis derive from the adjustment in portfolios that follows from an initial shock. Underlying weaknesses in balance sheets can linger for years without triggering a crisis. For example, a currency mismatch can be masked so long as continued financial inflows support the exchange rate. Consequently, the exact timing of a crisis is difficult to predict. However, should a shock undermine confidence, it can trigger a large and disorderly adjustment, as the initial shock reveals additional weaknesses and a broad range of investors, including local residents, seek to reduce their exposure to the economy. If these flows cannot be financed out of reserves, the relative price of foreign and domestic assets has to adjust.

I. International Investment Position and Risk Measurement

19.67 The BOP was developed as a statistical tool to measure economies' external imbalances by providing a detailed overview of the economic transactions of residents vis-à-vis the rest of the world. It was only with the fifth edition of the *Manual (BPM5)* that the IIP was added to the overall framework and a broader analysis of vulnerabilities became possible. The sixth edition of the *Manual (BPM6)* developed the IIP further and made it a truly analytical tool, particularly by providing an integrated view of flows and positions. The seventh edition of the *Manual (BPM7)* builds on these developments and focuses on the link between flows and positions and in understanding the analytical power of revaluations and other changes in volume. The next paragraphs complement Section H on the balance sheet approach and provide some considerations on how to develop the IIP to increase its analytical value for risk analysis.

1. Liquidity and Interest Rate Risk

19.68 Liquidity is one of the dimensions used in the macroeconomic statistical standards to group financial assets. This is, for example, visible in the distinction between listed and unlisted equity or in the breakdown of deposits between short-term and long-term deposits. Moreover, the breakdown by original maturity for debt instruments (e.g., loans and debt securities) provides an additional liquidity dimension but does not completely capture the liquidity needs by maturity. This can only be comprehensively captured when remaining maturity information is collected to show a more comprehensive picture of financing needs due (e.g., within the year). A classification by remaining maturity is already encouraged in the current macroeconomic statistical

standards for debt liabilities and data for short-term remaining maturity of debt liabilities by sector is requested in Table [A9-IV].

19.69 Another complementary approach to liquidity risk is to collect information about the duration of assets and liabilities. Duration is defined as the weighted average term to maturity of a financial instrument and can be used as a measure of the sensitivity of the value of the instrument to changes in interest rates.¹⁸ Therefore, revaluations (i.e., holding gains and losses) are intrinsically related to the duration of the portfolio—the sign of this relationship depends on the slope of the yield curve. However, the longer the duration of a portfolio, the greater the gains (or losses) for any given change in interest rates. Thus, despite the matching of the maturities of financial assets and liabilities, if the timing of the cash flows on assets and liabilities is not perfectly matched—that is, the duration of assets and liabilities differs—investors can be open to gains (or losses) as interest rates change.

2. Currency Risk

19.70 Currency mismatches (i.e., differences in the currency composition of financial assets and liabilities vis-à-vis the rest of the world) are frequently a source of macroeconomic risk, particularly for economies with less sophisticated and deep financial systems. The build-up of large positions in foreign-currency-denominated debt may pose substantial risks in case foreign currency inflows diminish and fixed debt payments schedules come due. This may exacerbate ongoing currency pressures, and hence an in-depth knowledge of currency risk is a critical macroeconomic policy tool. Obtaining information on the currency breakdown of debt liabilities is also crucial for financial

¹⁸For fixed-rate instruments, the period until the receipt/payment of each cash flow, such as six months, is weighted by the present value of that cash flow as a proportion of the present value of total cash flows over the life of the instrument. So, the more cash flows are concentrated toward the early part of an instrument's life, the shorter the duration relative to maturity. Duration equals remaining maturity only for zero coupon instruments.

investors since it increases transparency and improves the risk assessment of the creditor. On the asset side, detail on the currency composition of financial portfolios would support a sound macroprudential analysis and the identification of potential sources of risk arising from over-exposure to idiosyncratic shocks to certain currencies.

19.71 The IMF Financial Soundness Indicators (FSI) encompass several currency related indicators for deposit-taking corporations, namely foreign-currency-denominated loans and liabilities, respectively, to total loans and total liabilities. Also, the risk dashboard of the European Systemic Risk Board's (ESRB) reports on currency risk by looking into the percentage of total loans denominated in foreign currency. In the context of the second phase of the G-20 Data Gaps Initiative, the IMF, the Financial Stability Board (FSB), and the Bank for International Settlement (BIS) have been looking into the availability of a comprehensive data set on foreign currency exposures by sponsoring the collection of the data defined in Table [A9-I]. Table [A9-I] requests data for assets and liabilities broken down by sector and currency. It also requests information on foreign currency derivatives (notional amounts) to “adjust” for those exposures being hedged. This is a rough proxy as information broken down by the underlying purpose (hedging or speculation) of the derivative contract is not available.

19.72 While the IIP broken down by currency of denomination, in combination with information on foreign currency derivatives, provides a good picture of the structural currency exposures of an economy, it does not provide sufficient information for a comprehensive assessment of the impact of foreign currency movements to the net IIP of an economy. This analysis is supported by looking into revaluations of foreign currency derivatives and the net impact of revaluations due to exchange rate changes for other instruments. The net impact of currency-driven revaluations is in general negative for economies characterized by a net liability position in foreign currency and relative inflationary processes contributing to the depreciation of the domestic currency. For other

economies, the expectation is not as clear and depends on whether the economy has a net asset or liability position in foreign currency and on the stability of domestic currency.

3. Credit Risk

19.73 Credit risk is defined as the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. It arises from several dimensions, including liquidity and currency considerations as discussed in the previous paragraphs. When debtors suffer external stress or a crisis, their creditors experience losses in the form of adverse exchange rate movements, lower asset and bond prices, and debt write-offs. This effect was particularly pronounced in the years following the global financial crisis (see, for instance, the 2020 IMF External Sector Report). It may be particularly relevant to track debt write-offs because such losses will not be recovered whereas stock prices, for instance, may recover relatively quickly from large shocks.

19.73a IIP statistics by counterpart area or geographical detail are frequently available and can provide useful information to assess counterparty economy risk. The so-called *country risk* encompasses information on aspects such as political and social stability, rule of law, corruption, etc. It is historically one of the dimensions better covered in national BOP/IIP statistics and is particularly relevant in the context of monetary or currency unions or vis-à-vis main trading partners.

19.74 Data broken down by counterpart sector are also gaining importance, particularly sponsored by the IMF Coordinated Portfolio Investment Survey (CPIS). Indeed, for the time being, counterpart sector information is generally available only for portfolio investment. In some jurisdictions, it may also be available for direct investment (SPEs versus non-SPEs) and other investment. The cross-classification of IIP data by instrument, counterpart economy, and counterpart sector is a rather powerful tool to assess portfolio or credit risk.

19.75 However, there are other aspects of relevance to make a comprehensive credit risk assessment. In particular, the existence of credit derivatives (e.g., credit default swaps) or guarantees may change the risk level of a portfolio. For derivatives, information on notional amounts would be necessary, preferably broken down by counterpart area and sector. As to guarantees, depending on their nature, they may be captured by the BOP/IIP framework (standardized guarantees) or not. In any case, for credit risk analysis, the relevant piece of information is not the market value of these guarantees, but instead the underlying (notional) value of the debt being guaranteed. Rating information would also have strong analytical value. In this context, a breakdown of portfolio investment by rating grade would better qualify the creditworthiness of the portfolio—this information is in general missing in IIP statistics.

19.76 Another analytical presentation groups items in the financial account and the IIP by the type of resident recipient of external financing—for example, central bank, deposit-taking corporations except the central bank, general government. To support this approach, sectoral splits are required for financial account and IIP items.

J. Valuation Paradox in the International Investment Position

19.77 As a rule, revaluation effects should be interpreted with a degree of caution when used as a measure for an economy's or sector's gains and losses. Valuations are adjusted to comply with the accounting convention requiring financial positions to be reported at market values in most cases. Thus, the values recorded in the IIP do not necessarily reflect realized gains or losses. It should also be noted, especially from a sectoral perspective, that the IIP captures only the external part of a sector's financial balance sheet. Losses recorded here might, therefore, be offset by gains on domestic

positions. In addition, hedging operations, which investors may have used to fully or partially eliminate valuation risks, are likewise not always taken into account.

19.78 Certain issues may arise as a result of marking bonds to market (see paragraphs [7.X-7.X]). The valuation paradox refers to the fact that an economy's net IIP might improve, even though it is on the verge of insolvency. Given that prices for government bonds at risk of default fall, the corresponding liabilities in the IIP are assigned a lower valuation, notwithstanding the fact that the crisis economy's payment obligations remain unchanged. Box 19.1 provides a numerical example. The situation might be more pronounced in countries within a currency union, which restricts the extent to which exchange rate changes can reflect the relative creditworthiness of a country. On the other hand, a currency union might dampen bond price responses for a member country facing solvency problems if market participants expect the currency union's other members to bail out the distressed country. Even though the focus is on government bonds, the same mechanism is at play for other bond liabilities. The valuation paradox works in the opposite direction as well when rising bond prices—for example, due to a better rating—translate into higher liabilities, thus showing a lower net IIP, even though the payment obligations have not changed.

Box 19.1. Valuation Paradox: Numerical Example

Let us assume for the sake of simplicity that the economies' IIPs contain only two positions and that asset values are constant.²⁰ Liabilities exist in the form of a government bond which responds in Example 1 by falling in market price due to mounting solvency problems, and in Example 2 by increasing in market price due to a rating upgrade.

²⁰The examples presented in this box are *ceteris paribus* analyses. For instance, if an economy is facing mounting solvency problems, it is likely that it may have to draw on its external assets.

Example 1: Economy A faces mounting solvency problems

Economy A's IIP

| | Assets | Liabilities | Net IIP |
|-------------------|--------|-------------|---------|
| End of period t-1 | 25 | 100 | -75 |
| End of period t | 25 | 50 | -25 |

Bond price at the end of period t-1=100

Bond price at the end of period t=50

Example 2: Economy B's rating is upgraded, driving interest rates down and bond prices up

Economy B's IIP

| | Assets | Liabilities | Net IIP |
|-------------------|--------|-------------|---------|
| End of period t-1 | 25 | 100 | -75 |
| End of period t | 25 | 110 | -85 |

Bond price at the end of period t-1=100

Bond price at the end of period t=110

K. Calculating and Using Rates of Return

19.79 Rates of return are important for understanding the allocation of capital between economies, differences in the sustainability of current account deficits, and the

development over time of the current account, the financial account, and the IIP. Current-account investment income transactions, financial-account transactions, and other changes in financial assets and liabilities are all interrelated with important consequences for national economies. Because of their potential to influence investment and income, rates of return also influence economic outcomes. Suggestions for presenting the integrated IIP, investment income, and rates of return are shown in Table 19.2.²¹

Table 19.2. Integrated International Investment Position Statement, Investment Income, and Rates of Return

| | Integrated international investment position statement | | | | | | Current account investment income on financial assets and liabilities ¹ | Rates of return | | |
|--|--|-----------------------|---|--------------|--|------------------------|--|-----------------------|----------------------------|----------------------|
| | Beginning of period position | Accumulation accounts | | | | End of period position | | Income rate of return | Revaluation rate of return | Total rate of return |
| | | Financial account | Other changes in financial assets and liabilities account | | | | | | | |
| | | | Transactions in financial assets and liabilities | Revaluations | | | | | | |
| Exchange rate changes | Other price changes | | | | | | | | | |
| Assets (excluding financial derivatives) | | | | | | | | | | |
| Direct investment | | | | | | | | | | |
| Equity and investment fund shares | | | | | | | | | | |
| Debt instruments | | | | | | | | | | |
| Portfolio investment | | | | | | | | | | |
| Equity and investment fund shares | | | | | | | | | | |
| Debt securities | | | | | | | | | | |
| Short term | | | | | | | | | | |
| Long term | | | | | | | | | | |
| Other investment | | | | | | | | | | |
| Other equity | | | | | | | | | | |

²¹For additional practical guidance, refer to the updated *BPM Compilation Guide*.

| | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|
| Currency and deposits | | | | | | | | | | |
| Loans | | | | | | | | | | |
| Insurance, pension, and standardized guarantee schemes | | | | | | | | | | |
| Trade credit and advances | | | | | | | | | | |
| Other accounts receivable—other | | | | | | | | | | |
| Reserve assets | | | | | | | | | | |
| Monetary gold | | | | | | | | | | |
| Special drawing rights | | | | | | | | | | |
| Reserve position in the IMF | | | | | | | | | | |
| Other reserve assets | | | | | | | | | | |
| Liabilities (excluding financial derivatives) | | | | | | | | | | |
| Direct investment | | | | | | | | | | |
| Equity and investment fund shares | | | | | | | | | | |
| Debt instruments | | | | | | | | | | |
| Portfolio investment | | | | | | | | | | |
| Equity and investment fund shares | | | | | | | | | | |
| Debt securities | | | | | | | | | | |
| Short term | | | | | | | | | | |
| Long term | | | | | | | | | | |
| Other investment | | | | | | | | | | |
| Other equity | | | | | | | | | | |
| Currency and deposits | | | | | | | | | | |
| Loans | | | | | | | | | | |
| Insurance, pension, and standardized guarantee schemes | | | | | | | | | | |
| Trade credit and advances | | | | | | | | | | |
| Other accounts payable—other | | | | | | | | | | |
| Special drawing rights | | | | | | | | | | |
| Memoranda | | | | | | | | | | |
| Other investment assets and interest income before deduction of implicit financial services on loans and deposits (actual interest) | | | | | | | | | | |

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| Other investment liabilities and interest income before deduction of implicit financial services on loans and deposits (actual interest) | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

¹Includes pure interest on other investment loans and deposits after deduction of implicit financial services on loans and deposits.

19.80 The income rate of return is the ratio of investment income to the corresponding average asset or liability position in the IIP. Table [5.2] shows the link between financial instruments and their corresponding income. The revaluation rate of return is the ratio of revaluations to the corresponding average asset or liability position.²² Revaluations are holding gains and losses arising from changes in financial instrument prices, including exchange rates (see also paragraph [9.25]). The total rate of return is the sum of the income rate of return and the revaluation rate of return. Rates of return can be computed for assets (excluding financial derivatives) and for liabilities (excluding financial derivatives).

19.81 The estimation of pure interest on loans and deposits, i.e., after deduction of implicit financial services on loans and deposits, will cause rates of return on loans and deposits to differ from rates of return estimated from actual interest. The estimation of rates of return using both pure interest and actual interest (interest before deduction of implicit financial services on loans and deposits) would provide a more complete picture for analysis.

19.82 The systematic estimation of rates of return across the IIP can shed light on how the characteristics of investment across functional categories can differ. Functional categories reflect the differences in economic motivations and patterns of behavior

²²Because financial derivatives do not pay interest income and the revaluations are difficult to relate to an original principal investment, rates of return on financial derivatives would not be reliable if computed using the framework suggested here for estimating rates of return for other types of assets. Therefore, they are omitted from Table 19.2. Revaluation rates of return on financial derivatives could be a topic of additional research.

exhibited by investors in these categories. Consequently, instruments such as equity and debt that are included in portfolio investment and direct investment can have different rates of return when compared across functional categories. It is worth noting that the different treatment of retained earnings for portfolio investment equity and direct investment equity does not affect the total rate of return, but it will impact the mix between the income rate of return and the revaluation rate of return.

19.83 While *BPM6* focused primarily on income rates of return, *BPM7* also pays attention to revaluation rates of return, both of which are important tools for many different types of analysis. For example, paragraphs [19.XX–19.XX] on the valuation paradox rely heavily on the effect of revaluations on positions that are marked to market in the IIP. Another example is the effect of revaluations on direct investment positions. Direct investment positions that are marked to market in the IIP (using market capitalization methods) potentially generate much larger revaluations than positions that are recorded at own funds book value.

19.84 Rate of return differentials can be computed by subtracting the rate of return on liabilities from the corresponding rate of return on assets. The income rate of return differential is relevant to a possibly destabilizing feedback loop between the current account and the financial account as described in paragraph [19.35]. A current account deficit must be financed by a decrease in net foreign assets, and the decrease in net foreign assets has the potential to increase the current account deficit through a reduction in net investment income, inducing a destabilizing feedback loop. The impact of a decrease in net foreign assets on net investment income depends on the income rate of return differential. A positive differential will reduce the impact on net investment income, a differential of zero means the change in net investment income will be proportional to the change in net foreign assets, and a negative differential will increase the impact on net investment

income. Thus, the income rate of return differential can moderate or exacerbate this potential source of instability.

19.85 Rates of return and their impact on financial flows are an important factor in a comprehensive analysis of the sustainability of a current account deficit as described in paragraph [19.36]. Income and revaluation rates of return along with factors such as tax rates and expected future changes in prices play a role determining the expected real after-tax total rates of return on foreign assets and liabilities.

L. Further Information

Adler, Gustavo, Camila Casas, Luis Cubeddu, Gita Gopinath, Nan Li, Sergii Meleshchuk, Carolina Osorio Buitron, Damien Puy, and Yannick Timmer (2020), *Dominant Currencies and External Adjustment*, IMF Staff Discussion Note (20/05).

Adler, Gustavo and Daniel Garcia-Macia (2018), *The Stabilizing Role of Net Foreign Asset Returns*, IMF Working Paper (WP/18/79).

Adler, Gustavo, Daniel Garcia-Macia, and Signe Krogstrup (2019), *The Measurement of External Accounts*, IMF Working Paper (WP/19/132).

Allen, Cian, Camila Casas, Giovanni Ganelli, Luciana Juvenal, Daniel Leigh, Pau Rabanal, Cyril Rebillard, Jair Rodriguez, and João Tovar Jalles (2023), 2022 Update of the External Balance Assessment Methodology, IMF Working Paper (WP/23/47).

Balli, Faruk, Sebnem Kalemli-Ozcan, and Bent Sorensen (2011), *Risk Sharing through Capital Gains*, NBER Working Paper (17612).

- Bénétrix, Agustin S., Philip Lane, and Jay C. Shambaugh (2015), *International currency exposures, valuation effects and the global financial crisis*, *Journal of International Economics*, Vol. 96.
- Bergant, Katharina (2021), *The role of stock-flow adjustment during the global financial crisis*, *Journal of International Money and Finance*, Vol. 110.
- Deutsche Bundesbank (2018), *Germany's external position: new statistical approaches and results since the financial crisis*, *Monthly Report* (April 2018).
- Howell, Kristy, Jessica Hanson, Robert Obrzut, and Olaf Nowak (2019), *Current-Account Asymmetries in U.S.–EU Statistics*, BEA Working Paper (WP2019-6).
- International Monetary Fund (2020), *Global Imbalances and the COVID-19 Crisis*, *External Sector Report*.
- Lane, Philip R., and Milesi-Ferretti (2001), *The External Wealth of Nations: Measures of Foreign Assets, Liabilities for Industrial, Developing Countries*, *Journal of International Economics*, Vol. 55.
- Lane, Philip R., and Gian Maria Milesi-Ferretti (2007), *The External Wealth of Nations Mark II*, *Journal of International Economics*, Vol. 73.
- Lane, Phillip R., and Gian Maria Milesi-Ferretti (2014), *Global Imbalances and External Adjustment after the Crisis*, IMF Working Paper (WP/14/151).
- Obstfeld, Maurice (2012), *Does the current account still matter?*, *American Economic Review*, Vol. 102.
- Office of National Statistics (ONS) (2020), *Understanding the UK's International Investment Position*.

Rey, Hélène, and Pierre-Oliver Gourinchas (2014), *External Adjustment, Global Imbalances, Valuation Effects*, Handbook of International Economics, Vol. 4.

Chapter 20. Communicating and Disseminating Macroeconomic Statistics

(New SNA/BPM chapter)

***BPM7* Chapter 20 / 2025 SNA Chapter 21 Communicating and Disseminating Macroeconomic Statistics**

(New SNA/BPM chapter) ¹

A. Introduction

- 21.1 The way in which macroeconomic statistics are communicated and disseminated has a significant impact on users' understanding and utilisation of the data and should be viewed as a key component of the production chain of official statistics. Users benefit from comprehensive, consistent, accurate and reliable information communicated and disseminated on a timely basis in an accessible and understandable manner.
- 21.2 Macroeconomic statistics can be disseminated and communicated in various ways to enhance the full extent of their analytical usefulness, comparability through time and across economies, and to ensure that policy relevance is maximised. In addition, when communicating macroeconomic statistics, the terminology and presentation of the macroeconomic aggregates and concepts should, where sensible, reflect and align with the language of business, governments and the public.
- 21.3 There are various differences between countries when it comes to communicating and disseminating macroeconomic statistics. By developing consistent standards, a high degree of comparability will be achieved, in turn making users better aware of the basis of the data (for example, which version of the SNA and BPM is used by the country) before undertaking their own analyses. At the same time, recognising the diverse needs and preferences of different user segments (e.g., policymakers, businesses, researchers and the general public) and tailoring communication strategies accordingly can further improve the relevance of macroeconomic statistics. When communicating with different user segments, different terms can be used for the same content to assist in understanding.
- 21.4 Dissemination covers the technical dimension of providing accessibility to data mainly to the more specialised and expert users. However, statistical dissemination and communication go beyond providing accessibility to numbers and include specific narratives, key messages, visualisations, etc. which improve the user understanding and reduce the risk of misrepresentation by users.
- 21.5 Effective statistical communication will convey a message based on facts collected from data suppliers' explanations, comments and feedback on data movements. This information will help to explain to users what happened, when and where something happened as well as contributing to understanding why and how it happened. However, such information may not always be available from administrative data suppliers. Statistical organisations can use communication to demonstrate the relevance of their data whereby they can justify the public outlay and anticipate greater support for statistical programmes,

¹ The chapter is drafted as a joint SNA/BPM chapter. After global consultation and approval by the AEG/BOPCOM, only those issues that are relevant from the external sector statistics perspective will be included in *BPM7*.

improve relationships with data providers and gain appropriate visibility for their products.

- 21.6 This chapter aims to provide principles and guidelines for producers of macroeconomic statistics to consider together with some new recommendations to improve the way those statistics are communicated. This is to help improve comparability, understanding and the experience for the users of these statistics.
- 21.7 The chapter includes section B covering dissemination strategy and communication policy; section C covering communication with users; section D covering communication with data suppliers; section E covering statistical confidentiality; section F covering taxonomies and metadata; section G covering a framework for measuring alignment with the international macroeconomic statistical standards; section H covering prominence given to indicators other than GDP and clarification of the use of the term “net”; and section I covering the use of more understandable terminology for users.

B. Dissemination strategy and communication policy

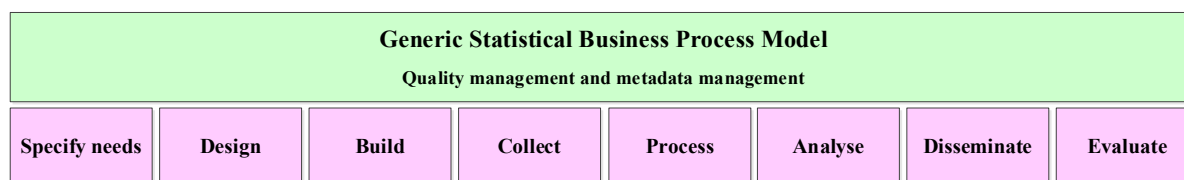
- 21.8 The production, analysis and dissemination of official statistics should be undertaken in a transparent and accessible way. To aid all users, information is provided through different channels (e.g., from printed releases to the use of social media) to meet different user needs and uses.
- 21.9 The dissemination policies and strategies designed by official statistics producers form part of the vision, mission, principles and values of their organisations, often available on official statistical producers’ websites and should be consistent with the underlying *UN Fundamental Principles of Official Statistics*³.
- 21.10 The principal aim of statistical communication is to reveal more of the information contained in statistical data (e.g., about movements in the data) and to make statistical information easier to interpret. Statistical communication is about providing factual explanations of the data in an easily understood and interesting fashion; and encouraging journalists and other users to consider how statistics might aid their analyses. Good dissemination policies support the provision of access to consistent and coherent statistical data to all users. Good dissemination practices ensure transparency and impartiality including the release of data to all users at the same time according to previously announced release calendars.
- 21.11 Dissemination of statistical data encompasses the use of a diverse array of channels and formats to reach a wide audience effectively. These channels include official statistical producers’ websites, printed materials and social media platforms. Data can be presented in various formats such as tables, charts or raw datasets to cater to different audience preferences and needs. With new technologies, the publishing capability should support digital dissemination. This will require setting appropriate standards and policies; support for mobile devices without undermining conventional release modes; commissioning new processes; and making more data available in an open format such as comma-separated value files.

1. Link to the UN Generic Statistical Business Process Model

- 21.12 The statistical value chain reflects dissemination and communication as key steps with both suppliers and users. The UN Generic Statistical Business Process Model (GSBPM) describes the set of business processes that form the statistical value chain needed to produce official statistics providing a standard framework and harmonised terminology to help statistical organisations. The Level 1 stages form the highest level of the GSBPM framework and are shown in **Figure 21.1**.

³ [Fundamental Principles of Official Statistics](#)

Figure 21.1 GSBPM – Level 1 stages



- 21.13 For statistical outputs produced regularly, the dissemination phase occurs in each iteration. The dissemination phase is made up of various processes: updating output systems; producing, managing and promoting dissemination products; and managing user support (including feedback from user satisfaction surveys). These processes are generally sequential but can also occur in parallel and can be iterative.
- 21.14 It is also important to recognise the collection phase. This is critical and relies on effective and relevant communication with suppliers, which will have a different focus than that needed for dissemination to users. This phase collects or gathers all necessary information using different collection modes (including extractions from statistical, administrative and other non-statistical registers and databases) before internal processes take place thereafter. The collection phase is broken down into various processes, from design and creation of the frame (e.g., questionnaire, definitions, notes, etc.) and sample selection to setting up and running the collection processes. The approaches and processes may differ for the different types of source data, for example, administrative data and business survey data.
- 21.15 The dissemination phase incorporates the release of the statistical products to users. It includes all activities associated with assembling and releasing a range of static and dynamic products via a range of channels. These activities support users to access and use the outputs released by the statistical organisation.
- 21.16 More detail on the supplier relationship is covered in **section D**.

2. Organisational structure and the media

- 21.17 The statistical systems of individual countries have a range of approaches when it comes to managing external communication functions. The placement of those functions within the organisational structure will have an impact on their effectiveness. Such placement should ensure that the communication of statistical data and the associated technological infrastructure receive a high level of attention and investment. Increased supply of data from non-official data producers means that there is an increasing need for the statistical organisations to improve communication in terms of quality, content, timeliness and channels used to reach its different users, in particular the media and policymakers, as well as harder-to-reach groups (for example, students, researchers, etc.).
- 21.18 The link between the economic statistics compiler and the communications team is key. This link will ensure the technical nuances and message(s) are addressed in a way the communications team can effectively communicate and draw out the important messages for the users in an understandable way. The effectiveness of this link can be enhanced through media training for the compilers as well as basic macroeconomic statistics training for the communications personnel.
- 21.19 It is recommended that all external communications are supported by a close working relationship with the media team, who tend to be the main distributors of statistics to the broader public. In this way, the information is available to all at the same time without privileged accesses. There may be a limited number of people with time limited pre-release access in a secure setting for specific reasons such as media outlets to prepare their headlines and briefing or to enable officials to prepare for the briefing of government ministers at release time. In this case, the time-limit needs to be defined in such a narrow way that the risk of external interference is minimised and the existence of any such arrangements should be made public by the statistical organisation.
- 21.20 The communications team is usually responsible for the relationship between the statistical producer and

the media by organising and coordinating press conferences, interviews with experts, requests from journalists and other requirements such as handling media crisis. Other key aspects that will need to be covered include handling social media, website management, digital design and data visualisation.

21.21 In line with the above guidelines, contact with the media, their professionals and representatives, should aim to:

- Promote an open relationship.
- Foster mutual professional respect.
- Meet the needs of media.
- Treat journalists as legitimate representatives of the public.
- Provide information as quickly and completely as possible, in a factual and responsible manner supported by evidence.

3. Principles and standards

21.22 Official statistics should be reliable, objective and relevant for decision making. An appropriate dissemination strategy can be developed in line with the *UN Fundamental Principles of Official Statistics*, whereby Principle 1 states that "...official statistics are to be compiled and made available on an impartial basis by official statistical agencies to honour the entitlement of citizens to public information." Principle 1 sets out a clear steer for dissemination. Therefore, statistical organisations should provide users with maximum access to official statistics in accordance with confidentiality guidelines.

21.23 To help establish good dissemination practices, there is a range of information about good practices already available. For example, the European Commission has maintained the European Statistics Code of Practice (revised 2017), which discusses dissemination practices. Similarly, many countries have likewise developed statistics codes of practice suitable for their purposes, and important to note, these codes serve both users and producers.

21.24 **Box 21.1** shows several publications developed by the United Nations Economic Commission for Europe (UNECE) providing guidance to statistical organisations to aid communication and dissemination of statistics. These were prepared within the framework of the UNECE Work Sessions on the Communication and Dissemination of Statistics.

Box 21.1 UNECE guidance to statistical organisations covering communication and dissemination**UNECE Guidance to statistical organisations**

The target audience is wide but the guidance is intended as a practical tool to help managers, statisticians and media relations officers, in particular those in the process of developing communication and dissemination strategies, and to aid training for new staff. The guides also recognise there will be different approaches as well as practical and cultural differences across countries. See: <https://unece.org/statistics/making-data-meaningful>

- Making Data Meaningful – Part 1 - A guide to writing stories about numbers
- Making Data Meaningful – Part 2 - A guide to presenting statistics
- Making Data Meaningful – Part 3 - A guide to communicating with the media
- Making Data Meaningful – Part 4 - A guide to statistical literacy
- Getting the Facts Right – A guide to presenting metadata (with examples on Millennium Development Goal Indicators)

4. Data Dissemination Standards

- 21.25 In 2001, seven institutions, namely the Bank for International Settlements, the European Central Bank, Eurostat, IMF, OECD, United Nations and the World Bank launched the Statistical Data and Metadata eXchange (SDMX) initiative and agreed to act as sponsors in order to develop common dissemination standards for the exchange of statistical information between public bodies at national and international levels. The SDMX information model covers various elements: descriptor concepts; packaging structure; dimensions and attributes; keys; code lists; and data structure definitions. The data structure definition is key as it conveys the data classification scheme that specifies the set of concepts required to describe and identify the statistical data items. Statistical compilers are encouraged to use SDMX in disseminating statistics to the international organisations which will improve comparability and ease of accessing data from across countries.
- 21.26 Countries are also encouraged to subscribe to the IMF Special Data Dissemination Standard (SDDS or SDDS Plus) or the Enhanced General Data Dissemination System (e-GDDS) for those agreeing to basic standards. These data standard initiatives encourage member countries to improve data quality. The National Summary Data Page (NSDP) is a “data portal” for economies participating in SDDS Plus, SDDS and e-GDDS, allowing users to access data, view metadata or browse links to online datasets for all available categories for an economy. For economies participating in SDDS Plus and e-GDDS, the NSDP enables automatic exchange and sharing of statistical data and metadata in SDMX. Similarly, under the G-20 data gaps initiatives, several templates have been developed for the G-20 members to report data for various recommendations, for example, templates on shadow banking and institutional sector accounts.

5. Release calendar

- 21.27 The availability of a release calendar in advance of publication is important for users. Knowing when the information is released and disseminated will inform user expectations and enable them to plan their activities accordingly. For example, they can schedule the preparation of topical analyses of data releases in advance of publication. The compilation and release schedule should be realistic for compilers, as users may become frustrated if statistical organisations do not meet previously announced release timings and, at the same time, useful for users.
- 21.28 The release calendar should be published at the beginning of each year, or at least well in advance of the release date, on the websites of the statistical producers responsible for dissemination. This will also help

to promote transparency and provide evidence that there has been no political or other inappropriate interference in the production and dissemination of official statistics.

6. Data revision and revision policies

- 21.29 Revisions are an essential part of data compilation in macroeconomic statistics. They will typically reflect new or improved data sources and methodologies but can also address corrections of past errors. Revisions, or alternatively expressed as updates or improvements, arise as a consequence of the trade-off between the timeliness of published data and their quality, in terms of accuracy and comprehensiveness. Statistical producers often compile and disseminate provisional data that are then revised when new and more accurate source data become available. Attempting to avoid revisions by producing accurate but very delayed data would fail to meet users' needs for timely statistics. Regular communication with users well in advance of expected updates and improvements to published statistical data will develop better public understanding of why revisions occur and help to ameliorate negative reaction.
- 21.30 Countries are encouraged to develop a well-designed revision policy that is managed and coordinated with related statistical domains and is communicated to users well in advance. Such a policy should aim to enable users to understand revisions in a systematic manner. The absence of coordination and planning of revisions can be perceived as a quality problem by users. An essential feature of a good revision policy is a predetermined schedule. Other features should include: reasonable stability from year to year; openness; advance notice of reasons for the revisions (perhaps also with some indicative size of the revisions); easy access for users to sufficiently analyse long time series of revised data; and adequate documentation on revisions in statistical publications and databases. To help users better understand revisions, the analysis of revisions is considered useful and may be published.
- 21.31 In some cases, the compiling agency may decide to carry out a special revision for the purposes of reassessing the data coverage or data compilation methods, which could lead to significant changes in the historical time series. It is recommended that such revisions be announced in advance and accompanied by explanations for such revisions, along with an assessment of their possible impact on the available data (see also the forthcoming *United Nations Handbook on National Accounting Backcasting Methodology*).
- 21.32 As part of the compilation and evaluation process, the published revisions should be evaluated to identify any persistent revisions to the earlier estimates of the aggregates or sub-aggregates in order to understand the potential for any systematic bias. This process will lead to identifying improvements to sources and methods thereby improving the quality of the future published estimates and reduce any revision bias.
- 21.33 Composition of revisions and explanations for users is covered in **section F**.

C. Communication with users

- 21.34 Macroeconomic statistics should be designed to meet the needs of a wide variety of users making different uses of the statistics.
- 21.35 An understanding of the possible user needs is vital in identifying effective ways to communicate statistical information. Knowing who the users are helps to guide the content of the message being conveyed when statistics are released in a language accessible to all. Also, the content and the form of communication needs to be adaptable in responding to rapidly changing user needs, for example, during periods of significant economic change and major economic events (e.g., COVID-19 pandemic).
- 21.36 The user community includes a range of diverse groups such as government, business, academia, analysts, economists, researchers, journalists, international statistical agencies, the media and the public. For macroeconomic statistics, users can be grouped into two main categories. There are *general data users* (such as general journalists, students, teachers, small businesses or ordinary citizens) who have wide ranging but simple data requirements and *analytical users* (such as government departments, local authorities, researchers, economic journalists, central banks and international organisations) with

- complex data requirements on detailed variables, time series and regional or institutional sector breakdowns.
- 21.37 To meet the different demands, the communication of macroeconomic statistics can take a variety of forms, for example:
- Scheduled regular statistical releases, typically made available online and sometimes also featured as press releases, will be suitable for the media and the general public users, who may be particularly focused on the main findings.
 - Special topic-related publications or methodological-type papers may be prepared, including time series and detailed data, accompanied by metadata and, on occasion, a short economic analysis based on these indicators.
 - Highly comprehensive detailed macroeconomic statistics are usually presented in the form of scheduled annual datasets (or yearbooks) and made available online.
 - Social media posts or similar short forms of communication can be used to supplement formal statistical releases and highlight newsworthy features of the published data to broader audiences.
- 21.38 Good standards of data visualisation in the design of tables and charts can have a role in effective dissemination of statistics. There is also a role for independent users of statistical data to develop and maintain innovative or well-designed online data visualisations of official statistics. Statistical producers can encourage innovation of this kind by publishing appropriately extensive definitions and by making datasets available in technically compatible ways, for example, comma-separated value files.
- 21.39 As indicated, it is important to be aware of the user base and for each user base “what” should be communicated and “how” it should be communicated. The relevance of what is being communicated needs to be clearly understood, and in turn, the most appropriate channel of communication should be considered, for example:
- Data – estimates versus projections. As the release vintages evolve, it would be useful to convey information on the increasing data content, thereby reducing data uncertainty.
 - Current data versus historical (or archived) data.
 - Level of aggregation.
 - Micro data versus macro data.
 - Metadata.
 - Story or knowledge adding explanations to understanding the data movements.
- 21.40 In terms of the “how” considerations, there are different channels, for example:
- Printed format (for example, press releases, newsletters, infographics, etc.) versus electronic (for example, PDF documents, Excel files, infographics, XML, downloadable datasets, etc.) or available in both forms.
 - Different machine-readable formats that better suit users’ needs.
 - Internet release thereby addressing website design, search facilities, etc.
 - Video releases, blogs, podcasts, presentations, live streaming, etc.
 - Databases, tables charts, animations, etc.
 - Social media.
- 21.41 As different users use a range of different devices, for example, desktop, laptop, tablet or smart phones, statistical producers should seek to ensure that their release modes remain as widely accessible as possible, and not limit their approach to just one design of online format.

- 21.42 Other aspects of statistical dissemination that may require consideration include:
- Freely available detail versus charged bespoke analyses requested by users.
 - Regular analysis of press coverage and feedback to get early indication of changing user demands.
 - User satisfaction surveys providing feedback to aid continuous improvement.
 - Seminars, webinars, workshops and conferences involving different groups of users (and producers) to increase their awareness and sign-post developments.
 - Providing training and education of macroeconomic statistics for users.

D. Communication with data suppliers

- 21.43 Similar to the engagement between statistical producers and users, various initiatives and engagements between statistical producers and data suppliers are crucial. From the statistical producer perspective, there should be an effective data supplier engagement strategy as the suppliers have a significant stake in helping to produce high-quality official macroeconomic statistics. This strategy will need to reflect the different types of suppliers of information and the different ways the information is supplied, for example, business surveys, administrative data, household surveys, etc.
- 21.44 There is an ever-increasing need to improve data suppliers' experience in completing the demands from statistical producers. The strategy should help suppliers understand why their participation is important. With respect to individual entities that serve as important suppliers of statistical data, for example, businesses, major corporations, banks, government departments, etc., statistics producers should promote cooperation by explaining the essential value of the required data; minimising the reporting burden as far as is reasonably practicable; assuring data suppliers that proper standards of security and confidentiality are applied; and acting on their feedback as appropriate.
- 21.45 Some key principles to reflect on:
- Providing choice to data suppliers (e.g., telephone data entry, secure electronic file transfer, etc. in addition to traditional paper submission) and recognising that their time is valuable.
 - Minimising impact or burden on data suppliers (e.g., fair and equitable when it comes to how often they are selected in survey samples, only asking for the information once or minimising any duplication).
 - Having high standards for how statistical producers communicate with data suppliers (e.g., standardised responses, phone call assistance and data collection, timely communication).
- 21.46 Producers of official statistics also need to consider the way they communicate with their data suppliers, who represent a unique set of stakeholders that may or may not be users of official statistics. In particular, the use of the concepts, terms and definitions that suppliers can understand is essential in collecting data to enable the compilation of statistics in line with the concepts, terms and definitions of the macroeconomic statistical standards, either directly or appropriately adjusted to meet the relevant definitions.
- 21.47 Data collectors may not be able to use the language, terminology, etc. used within the macroeconomic statistical standards when communicating with data suppliers. Instead, they need to converse with data suppliers using company accounting or administrative terms and definitions. To enable this, for example, the questions and notes on survey questionnaires should be tested with a sample of data suppliers or bridge tables may be needed to link the business survey data or administrative data to concepts and definitions needed to comply with those in the macroeconomic statistical standards. It is important to use common concepts, terminology and classifications when designing business survey questionnaires in a language the supplier will understand as well as applying similar principles when publishing business survey results to aid the users. Comparability is not possible without some uniformity across the published business survey data. In addition, along with published data, some companies may provide more detail than published in the format of financial statements or using bespoke survey questionnaires

designed by the producer in conjunction with the company which will require appropriate conversion for macroeconomic statistical purposes.

- 21.48 Often it is an accountant that responds to official statistical producers' requests. They tend to be more familiar with business accounting concepts, terms and definitions than those used in the macroeconomic statistical standards. Data collectors also need to be aware of any changes to the business accounting rules, including changes to terminology, to ensure the data collected remain valid. Sometimes the accountant may not be able to provide all the data needed, for example, labour related information such as hours worked, numbers employed, etc. is supplied by the human resource (personnel) department. Here, it is important to ensure the information provided is consistent, for example, covering the same reference period.
- 21.49 Statistical producers can also use online platforms like crowdsourcing which invite the public to share data and information as well as collect data which would be unavailable to data collectors through the usual channels. Other new channels that may be utilised include artificial intelligence providers. However, given the novelty of these data sources, statistical producers would need to ensure that methodological and quality issues are appropriately addressed.
- 21.50 Data collectors could provide feedback to data suppliers on the quality, including accuracy and reliability, of the data they provide. This feedback loop allows data suppliers to address any issues or errors in their data submissions and helps maintain, or improve, data quality standards. Other examples of effective communication to improve the supplier experience that could be considered include:
- A survey calendar that gives suppliers an indication of when they can expect to receive a questionnaire.
 - Sharing of survey results to which they have contributed.
 - Personalised statistical feedback, including sharing tables with suppliers where they can see their own contributions to the totals.

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E. Statistical confidentiality

- 21.51 In terms of statistical confidentiality, by law, most official statistics producers collect data from businesses, government bodies and households for statistical purposes only and mostly under some form of legislation. Statistics based on these data generally cannot be disseminated, sold, or published in a way that permits the identification of data referring to a particular business or household. Thus, it is important to ensure appropriate data confidentiality policies, anonymisation techniques and disclosure checking procedures are in place as part of the process before publication of any data. There is EU guidance covering the *General Data Protection Regulation (GDPR)* and the protection of microdata as well as the UNECE Statistical Disclosure Control Committee endorsed book, *Statistical Disclosure Control* (August 2012, Wiley).
- 21.52 One of the most important policy concerns relevant to data dissemination is the preservation of statistical confidentiality. Statistical confidentiality is necessary in order to gain and keep the trust of both data suppliers to statistical surveys and users of the statistical information. Principle 6 of the Fundamental Principles of Official Statistics stipulates that individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes. It is therefore important that appropriate disclosure checking procedures are in place as part of the dissemination process. In any case, permissions need to be sought from a business to publish information that would otherwise be considered confidential so as to avoid the loss of fundamental pieces of statistical information. It is also important to clearly communicate confidentiality statements and arrangements to data suppliers and users. In some cases, confidential information may be provided to a specific, limited number of users under strict and agreed conditions for the purposes of validation and quality assurance before its official release. For example, where data validation by an external organisation or a specific expert is necessary or significant benefits as part of data quality assurance are expected or have been previously demonstrated. Such specific cases should be adequately publicised for transparency, for example on the website of the relevant producers.

- 21.53 As much as statistical confidentiality is very important, it should not be used in itself as a reason not to release information. Instead, the goal should be to maximise the dissemination of information as a public good for the wide range of users while still ensuring confidentiality obligations are met. It should be recognised that as more granular information is collected to meet increasing user demand for more detail, this may lead to more cases of disclosure and suppression or aggregation of cells.
- 21.54 On a global scale, there is a growing challenge to ensure the data covering multi-national enterprise (MNE) groups are properly and adequately covered (see also chapter 23). The various impacts of globalisation (e.g., cross-border flows like intellectual property products, impact of change in economic ownership, merchanting, etc.) imply that domestic only data collection is insufficient to ensure all activities of the MNE group are adequately captured and understood as well as to ensure a reduction of trade and financial account asymmetries to the extent possible. Respecting individual jurisdictions' rules on confidentiality, there is a need for statistical producers to be able to exchange data, share data and reconcile the activities of MNE groups. This requires setting up of appropriate legal agreements and utilising secure channels to enable data exchange. More details are provided in the *UNECE Guide to Sharing Economic Data in Official Statistics (2021)*.
- 21.55 For researchers, alternative approaches allowing access to micro data for statistical or research purposes should be considered, for example:
- Secure data labs to allow researchers to access and analyse micro data, whereby the research published does not reveal any confidential data.
 - Signed data access agreements, which allow access to secure online data areas for specific research or analyses and with limited time.

F. Taxonomies and metadata

- 21.56 When statistics producers publish macroeconomic statistics, they also need to provide information about the product and context of the released statistics in order to enable users to properly use and adequately interpret the data.
- 21.57 This section provides guidelines, including taxonomies, that statistical producers should consider integrating into their current communication practices as appropriate. These practices will assist users and, if standardised, help to improve cross-country comparability.

1. Metadata

- 21.58 Metadata may be understood as “data about data” that can enable and facilitate sharing, querying, understanding and using statistical data across process stages such as collection, compilation and dissemination. Metadata apply to data definitions at different levels of aggregation, from micro data to macro data. Accessible and comprehensive metadata also promotes data literacy by helping users navigate complex statistical concepts and understand the nuances of economic indicators. They encompass administrative facts about the data such as who created them and when, and the definition of the concepts applied along with a description of how the data were collected and processed before they were disseminated or stored in a database. Metadata are important for both producers and users. Common standards and definitions for metadata should be followed to the extent possible throughout all statistical domains, in order to facilitate the linking and integration of statistical information such as the examples covered in paragraphs 21.25 and 21.26.
- 21.59 Metadata dissemination should be an integral part of the dissemination strategy. As metadata are generated and processed during every step of the compilation process, there is a strong need for a metadata management system to ensure that the appropriate metadata retain their links with data. A good practice in this regard is the active linking of metadata to the statistical data that they describe, and vice versa, by implementing a system that allows metadata to be recorded as part of the data infrastructure throughout the various stages of the statistical production process.

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2. Releases and vintages of data

- 21.60 National statistics producers have developed a range of practices for communicating statistical outputs, updates and methodological changes to users. These practices have greatly assisted with the interpretation and use of national accounts, external accounts and government finance statistics data as well as various other statistical domains. This variation in nationally determined approaches reflects the historically limited available guidance in macroeconomic statistical standards. For example, countries use phrases such as provisional, first, preliminary, second and final to communicate different vintages of economic statistics. Furthermore, the substance of a given release is communicated using terms such as initial estimates, mature estimates, final estimates, data revisions, benchmark revisions, rebased estimates, improvements to methods and corrections among others and experimental estimates.
- 21.61 Producers of macroeconomic statistics should match the need that users have for timely, high frequency economic data with their need for highly accurate economic data. In addition to balancing this timeliness / accuracy trade-off, producers also need to match the expectations that users have for a long consistent time series with their desire for agile macroeconomic statistical standards that ensure an exhaustive measure of economic activity.
- 21.62 Vintages refer to the release of updated economic statistics for the same time period, resulting from the availability or processing of new data such as more detailed or benchmark data surveys as well as methodological improvements. As vintages evolve, they are a regular and anticipated part of the statistical production process. They should be consistently described and their release dates pre-announced in a release calendar. To illustrate this and the type of future releases, consider a national authority who releases [an estimate of GDP]/[current account data] for the first quarter of 2023, on May 30th, 2023. Between 2023 and 2030 several revised estimates may be made for the first quarter of 2023 as illustrated in the example below:
- June 30th, 2023 2023 Q1 may be revised due to more data becoming available [and seasonal adjustment].
 - September 30th, 2025 2023 Q1 may be revised due to benchmarking to annual estimates [through supply and use tables as well as revised seasonal adjustment analyses].
 - May 29th, 2026 2023 Q1 may be revised due to the results of an [economic census] /[benchmark survey].
 - September 30th, 2030 2023 Q1 may be revised due to the implementation of the new international standards for macroeconomic statistics **[SNA]/[BPM]**.
- 21.63 Adherence to standardised definitions to describe different vintages of macroeconomic statistics will improve the use and interpretation of economic data. As well as the title and definition of the data release, the user needs to know the reference period to which it relates, the date of the release, the origin and quality of the sources. Consistent presentation standards can facilitate data comparisons between countries.
- 21.64 Statistical producers should adopt the proposed common approach when communicating different releases or vintages of data to users. The description of the release, at a minimum, should include information about the: (1) substance of the release; (2) timeliness; (3) frequency; (4) the reference period; and (5) the update period. Defining, describing and communicating vintages of data is a complex undertaking. Before outlining this recommendation in detail, it is important to first establish a set of terms and definitions that help frame the recommendation as shown in **Box 21.2**.

Box 21.2 Terms and definitions related to different vintages of economic data releases

- A **data point** is a discrete unit that can be represented numerically. There are different sources such as data collected, measurement of data based on data collected and model-based estimates.
- A **time series** is a series of regular time-ordered data values of a quantitative characteristic of an individual or collective phenomenon taken at successive, in most cases equidistant, periods / points of time.
- A **data vintage** is a data value or a dataset (sequence of values) for a given reference period that has been released for use at a particular point in time (release period). A new vintage of data is established when the same set of data for the same reference period or some overlapping portion of the reference period is released for use at a different point in time (release period).
- A **reference period** is the time-period represented by the data.
- The **update period** is the time-period over which revisions to a data value have been applied.
- A **release period** represents the calendar date when the data are released to the public.
- An **update** is a revision which is defined as the numerical difference between two vintages of the same data point.
- A **regular (or routine)⁴ update** relates to the incorporation of scheduled, more complete (not necessarily final) source data, improved models, or other iterations of the compilation process. Regular revisions occur for both sub-annual and annual estimates and can occur throughout the year, at regular (often yearly or quarterly) intervals, or as new information becomes available. Regular revisions may also include for example, the impact of seasonal adjustment, the correction of compilation errors or minor methodological adjustments made outside the benchmark or comprehensive revision process.
- A **benchmark estimate** is the final vintage of a dataset, whereby there is no further expected improvement. It is compiled using the most comprehensive and highest quality source data and the most advanced methods at that point in time. Benchmark estimates are not expected to be further revised and therefore are often referred to as the “final” estimate. However, a change in the definition of the concepts used or the application of new macroeconomic statistical standard or the use of a new data source can change a benchmark estimate.
- A **benchmark update** reflects revisions from the incorporation of a benchmark estimate(s) into a given set of macroeconomic statistics or accounts.
- A **comprehensive update** is a special case of benchmark update where the revision to the macroeconomic dataset not only incorporates the final vintages of source data but also integrates new or updated concepts, the application of new accounting treatments, classifications or substantially improved methods or updating a base year. These generally occur when there are major changes to the macroeconomic statistical standards that are used to compile the accounts. These types of revisions often result in a discontinuity in the time series and a need for compilers to consider whether to apply methods such as backcasting to adjust historical data.

21.65 Together the terms, routine updates, benchmark updates, comprehensive updates are the recommended terms to be used when communicating the “extent” or “substance” of revisions. The first two terms mainly reflect the vintage of source data that enter the compilation process. The term comprehensive revision reflects the addition or changes to concepts, methods (substantial changes), classifications or presentations. All other terms should be phased out as part of the 2025 SNA implementation.

[The rest of this sub-section will not be included in BPM7]

21.66 To illustrate the standard format recommended for communicating the notion of “substance”, series, reference period, timeliness, frequency, type of revision and update period to users, consider the following example. Assume that on average the first, second and third vintages of quarterly GDP are published 30, 60 and 90 days after the reference period, respectively. Assume further that the estimates are based on incomplete source data (such that each vintage is a result of a routine revision). These

⁴ A regular / routine update can be referred to as either regular or routine with the same meaning and used interchangeably – we will use routine hereafter.

vintages could be categorised as shown in **Table 21.1**.

Table 21.1 Naming Convention - Quarterly GDP (successive vintages for the same reference period)

| Series | Reference Period | Timeliness | Frequency | Type of Update | Update Period |
|--------|-----------------------|------------|-----------|----------------|---------------|
| GDP | First quarter, Year t | 30-day | Quarterly | | |
| GDP | First quarter, Year t | 60-day | Quarterly | Routine | Year t, Q1 |
| GDP | First quarter, Year t | 90-day | Quarterly | Routine | Year t, Q1 |

21.67 These vintages should be communicated as:

- Quarterly National Accounts release, first quarter Year t - 30-day
- Quarterly National Accounts release, first quarter Year t - Routine update – 60-day - (Year t Q1 revised)
- Quarterly National Accounts release, first quarter Year t - Routine update – 90-day - (Year t Q1 revised)

21.68 For users' reference, in line with the releases above, the vintages could be recorded using the real-time releases with the information as shown in **Table 21.2** where it can be seen how the estimate for each period changes or not in successive releases.

Table 21.2 Recording Vintages of Data in Real-time Tables: Quarterly GDP

| Series | Frequency | Release Date | Type of update | Q1 2024 | Q4 2023 | Q3 2023 | Q2 2023 | Q1 2023 |
|--------|-----------|---------------------------------|----------------|---------|---------|---------|---------|---------|
| GDP | Quarterly | June 30 th , Year t | Routine | 99 | 95 | 90 | 85 | 80 |
| GDP | Quarterly | May 30 th , Year t | Routine | 102 | 95 | 90 | 85 | 80 |
| GDP | Quarterly | April 30 th , Year t | Routine | 100 | 95 | 90 | 85 | 80 |

Note, the above numbers are for illustrative purposes only.

3. Sources of product updates or revisions

21.69 The macroeconomic statistical standards have three basic features. Firstly, they define the concepts to be measured. Secondly, they outline the methods that can be used to “quantify” those concepts and the accounting rules that need to be followed when recording various flows and stocks. Thirdly, they identify the classification systems, accounts, and table structures that should be used to present the data. One or more of these features can be the source of revising datasets or the presentation of datasets.

21.70 Statistical producers should consider categorising and decomposing the source of the updates (revisions) into different categories reflecting the source of the revisions. These can include for example:

- **Conceptual changes** will cover alignment to an updated set of macroeconomic statistical standards.
- **Methodological changes** will encompass for example:
 - coverage adjustments (for example, exhaustiveness);

- changes to source data (for example, new results based on improved methodology for grossing of survey results, replacing modelling algorithm with a survey-based estimate etc.);
 - quality improvements (for example, data validation, consistency of source data results, seasonal adjustment, etc.); and
 - accounting rules to be followed (for example, changes from cash to accrual accounting).
- **Presentational changes** will cover new tables, charts, revisions triangles, granular detail, etc. The aggregate(s) may not change but the way in which the components are presented are changed.
- 21.71 Such a decomposition should depend on the source and size of the revisions and may be broken down further, if appropriate, for example, if a single revision combines multiple issues or affects multiple accounts, in order to help users' interpretation. Levels and growth rates effects of revisions should be distinguished. Producers may also wish to consider showing all the components of the revision(s) for a single period or across all periods revised.

4. Types of statistical products

- 21.72 Statistics producers seek to disseminate established formats and content choices in statistical releases. They also seek to develop new releases or indicators in response to meeting changing user or public priorities or as new data collection projects come on stream. These can include developmental versions of statistical products, sometimes termed experimental statistics (or similar labels) that may not be of the quality required or data assured as existing products.
- 21.73 Whatever the descriptor, the common theme is to communicate issues of quality such as whether the:
- estimates comply with nationally or internationally adopted conceptual and methodological standards;
 - source data used to compile the estimates are reliably defined and produced; and
 - compiling agency is producing the statistics in an exploration or in a development phase or is otherwise expecting user feedback on the data.
- 21.74 It would be helpful for users if a consistent taxonomy could be adopted and applied through time and across countries to communicate the quality of the data. It is recommended that a two-level taxonomy for classifying product quality be adopted as shown in **Box 21.3**.

Box 21.3: Statistical product quality: Two-Level Taxonomy

| | |
|---------|--|
| Level 1 | Official Statistics: Estimates that incorporate recommended nationally or internationally adopted concepts, methods, accounting rules and classifications and meet all the standards required. |
| | Official Provisional Estimates: Provisional estimates incorporate nationally or internationally adopted concepts, methods, accounting rules and classifications but represent an early estimate before more comprehensive data becomes available. |
| Level 2 | Experimental Estimates: Experimental estimates released by a statistical producer relate to statistical products that vary in limited ways from nationally or internationally recommended concepts, methods, accounting rules or classifications in the production of the estimates but where the producer has good confidence in their validity. |

- 21.75 The first level of official statistics will include official statistics and official provisional estimates. A key

distinguishing feature of provisional estimates is that there is an expectation these early estimates will soon “graduate” to a revised, more mature official statistics status as the methods already meet the standard required. Statistical producers may compile and disseminate provisional data a number of days after the period in question or when a target data content has been achieved. The provisional estimate will mature to the full official estimate once new or more accurate source data become available. It is also possible within the same vintage of release that some data items might be “official” and others “official provisional”, for example, the observations for the latest period.

- 21.76 The second level reflects experimental estimates released by a statistical producer. Often, they may be of a research or indicative nature or based on a range of modelling assumptions. The source data used to compile the estimates may be untested and its quality may not be quantifiable as would be the case with Level 1 official statistics or may be based on indicators / proxies which may not conform to the concepts required. The data are communicated with a “proof of concept” notion and the main motivation for releasing them is to seek feedback so the estimates can be improved upon. However, with a range of improvements to meet Level 1, they may meet the standard to be deemed as an official statistic. These releases tend to be more ad hoc with respect to frequency of updates.

1. [the following six paragraphs will not be included in BPM7]

- 21.77 In addition to the need to communicate the quality of a product to users there is also a need to situate the product within the overall framework. **Box 21.4** shows the taxonomy of the different accounts / tables and their relative placement.

Box 21.4 Taxonomy of the different accounts / tables and their relative placement in relation to the SNA

| Economic Accounts / Tables | Placement |
|---|--|
| Sequence of Economic Accounts | Form the core accounts / tables underpinning the main sequence of economic accounts operating within the SNA boundary. |
| Supplementary Accounts / Tables (e.g., extended SUTs, IOTs, pensions, regional, environmental) | Operate within the SNA boundary and provide additional information that supplement the main sequence of economic accounts. |
| Thematic Accounts / Tables (e.g., health, tourism, sport, creative sector, etc.) | Operate within the SNA boundary and provide additional detail on a certain aspect or theme. |
| Extended Accounts / Tables (e.g., unpaid household work) | Operate beyond the SNA boundary and provide additional information beyond the sequence of economic accounts. |

- 21.78 The SNA is a framework covering a set of inter-related accounts that trace economic activity from production to distribution of income, expenditure, saving, capital formation, financing, revaluation and other changes affecting stocks, to balance sheets representing stocks of assets and liabilities. In addition to a “prescribed” list of accounts and tables (i.e., sequence of economic accounts and supply and use tables), the SNA also recommends that countries produce additional information in the form of supplementary accounts / tables, extended accounts / tables and thematic accounts / tables, etc. - all of which have a status different from that of the main sequence of economic accounts and briefly shown in **Box 21.4**.
- 21.79 Users would benefit if statistical producers followed similar practices and common definitions when referencing the products or statistical outputs associated with a particular statistical standard. Here, users will better understand how the different accounts fit together and how they compare across countries. In addition to defining an account, there is also a need to delineate between those accounts that are part of the sequence of economic accounts and those outside the sequence of economic accounts.

- 21.80 Accounts as defined by the SNA have an opening and closing item linking resource and use flows (related to a certain group of transactions and other flows) and stocks (levels). Accounts are also related to each other such that the closing balance of one account can be the opening balance of the subsequent account. The term “table” is distinguished from account in that tables do not have a balancing item and are not part of the sequence of economic accounts. Specific tables tend to be extracts from an account or several accounts and illuminate particular aspects.
- 21.81 The macroeconomic statistical standards also offer the flexibility to develop thematic accounts / tables. These types of accounts / tables are covered in more detail in chapter 38 on thematic accounts and provide statistical producers the opportunity to experiment with both the classification, concepts and presentation to provide a fuller, more detailed picture of the activities involved.
- 21.82 The macroeconomic statistical standards also include recommendations related to the development and dissemination of supplementary tables such as those covering pension entitlements or extended tables like unpaid household activities.

[the following two paragraphs will not be included in the 2025 SNA]

- 21.83 This *Manual* shows a standard presentation, which is designed to be used flexibly and to support many kinds of analysis. However, it is recognized that no single framework can meet all the different analytical interests. Thus, supplementary presentations are encouraged (see also Chapter 21 of the *2025 SNA* for thematic, extended and other supplementary accounts). Such presentations would be based on the circumstances in each economy and are not included in the standard components or memorandum items. They may include data from other sources that are not necessarily obtained from the external accounts compilation system.
- 21.84 Supplementary presentations provide a framework linked to the standard presentation and enable attention to be focused on a certain field or aspect of external linkages. Examples include trade and investment income by enterprises characteristics; trade by currency; separate identification of factoryless goods production; etc., which are developed in the context of globalization. In addition, the external accounts have more detailed presentations for direct investment, portfolio investment, external debt, remittances, tourism and reserves. The analytic and monetary presentations are discussed in Chapter 19. Statistics on activities of multinational enterprises (as discussed in Chapter 15) are also a related data set. These presentations use the basic framework as a starting point but differ by adding detail or other information, or by rearranging information, to meet particular needs. Use of the basic framework as a starting point increases the ability to relate the topic to other aspects of the economy while maintaining international comparability. Specific manuals and guides are produced on some of these topics. The range of supplementary data is wide and can be developed according to national circumstances.

5. Presenting the tables and accounts

2. This sub-section will not be included in BPM7

- 21.85 The SNA provides the main sequence of economic accounts and tables, broken down by institutional sector(s) as well as the rest of the world. The full set of transactions, other flows and stocks are broken down into the different accounts from the production account through to the balance sheets. To avoid over-crowding the main accounts / tables, in each of these accounts / tables there may be further breakdowns, for example by institutional sector, by industry, by product, by function, by transaction, by flow, by stock, by asset, by liability, etc.
- 21.86 In the SNA, specific unique codes are shown where applicable as covered in Annex II, for example, S – institutional sectors and sub-sectors, B - balancing items, P - products, D - distributive transactions, F – financial transactions, etc. Specific suffixes are reflected in the rest of the world accounts functional categories, for example, D - direct investment, P - portfolio investment, F – financial derivatives, etc. Each of these categories may have different levels or types of further breakdowns, some of which are covered below.
- 21.87 To aid cross-country comparisons and to aid the user, statistical producers should “publish” a range of other breakdowns using the agreed international classifications and their respective hierarchies within

those classification. For example:

- In terms of the industry breakdowns. For example, the production and income approaches to measuring GDP, gross fixed capital formation, changes in inventories and labour can all be split by industry using the International Standard Industrial Classification (ISIC) Revision 5. The ISIC Revision 5 splits the economy by industry at the section level (one letter codes, for example, A – agriculture, forestry and fishing, B – Mining and quarrying, etc.). These sections are further split into divisions using two-digit numeric codes, for example, separating out 01 - agriculture, 02 - forestry and 03 - fishing. These divisions can then be further split into groups, and in turn further split out into classes. Countries can, and do, have greater level of detail depending upon the activity in the economy.
- In terms of a functional link. Household final consumption expenditure is typically published as a whole economy aggregate but can also be published using the two-digit categories known as Divisions of the Classification of Individual Consumption According to Purpose (COICOP) 2018. For example, 01 Food and non-alcoholic beverages, 02 Alcoholic beverages, tobacco and narcotics, etc. More detail can be published for each of the two-digit COICOP divisions, split further into groups, in turn split further into classes.

21.88 Examples of other additional tables which are useful for a range of users providing variations supporting an aggregate, for example:

- GVA can be presented by institutional sector, by market and non-market sectors, and by public and private sectors.
- Household final consumption expenditure can be shown split by type of goods characterised by durability (non-durable, semi-durable and durable), services and the link between the national and domestic concepts (i.e., resident's expenditure abroad and non-resident expenditure within the economic territory).
- Gross fixed capital formation and changes in inventories can be analysed by industry or by institutional sector or by type of asset.

21.89 Countries' own classifications may have a greater level of detail and will depend upon the scale or uniqueness of the activity in the economy, resources available for data collection and user needs. Nonetheless, these national classifications for publication and dissemination should preferably align either one-to-one or many-to-one to the international classifications.

21.90 The data collection, compilation or balancing may take place at different levels reflecting, for example, the diversity of the economic activity and resources available to the statistical producer. However, allowing for statistical disclosure, the publication levels should reflect the international classifications. For example, if the ISIC is used as described in **paragraph 21.85**, this would enhance the quality of labour and capital productivity analyses within an economy as well as international comparisons. Also, the use of the correspondence tables linking the different classifications enhances the user linking and analytical capability.

21.91 For further details, see **2025 SNA, Annex 2**, Classification and Coding Structure of Accounting Entries which also shows references to other international classifications that may be used. **[to be cross-checked when complete]**

G. A framework for measuring alignment with the international macroeconomic statistical standards

21.92 An important feature of the macroeconomic statistical standards is their ability to develop internationally consistent macroeconomic statistics which in turn facilitate the comparison of estimates across countries. However, when countries use a macroeconomic statistical standard to compile macroeconomic statistics, they have discretion in implementing the recommendations to accommodate their specific circumstances while maintaining comparability and quality to the extent possible. These circumstances could range

from limited resources and data availability to systems constraints to user needs and meeting policy demands. For pragmatic and resourcing reasons, the macroeconomic statistical standard recommendation may not be implemented, if an activity or concept is economically immaterial for a given economy. This results in varying degrees of ‘alignment’ to these standards across countries. For users to be confident when making cross-country comparisons, they need some assurance that the economies’ estimates are compiled on the same basis.

- 21.93 A set of internationally accepted alignment frameworks (e.g., for the SNA, BPM and GFS) have been developed to provide structured, systematic and consistent methods to assess an economy’s alignment to these standards. These alignment frameworks draw heavily on existing assessment frameworks and tools available to users. For example, the IMF's Data Quality Assessment Framework (DQAF) and Reports on the Observance of Standards and Codes (ROSCs), the UN's Data Quality Assessment Framework (UN-NAQ) and the ISWGNA's Minimum Required Data Set (MRDS).
- 21.94 The alignment frameworks are stand-alone tools intended for national statistical authorities and international agencies to assess macroeconomic statistical methodologies and processes at country or country-group levels.
- 21.95 These alignment frameworks are voluntary and based on self-assessment. They allow countries periodically to assess their macroeconomic statistics and development programs. It is important for statistical producers to maintain transparency and document any deviations or adaptations from the macroeconomic statistical standards in their metadata and methodological notes. Thus, they are encouraged to use these common frameworks and make the results publicly available in accessible ways for all users. This section focuses on the alignment framework for the [SNA]/[BPM] domain. The alignment framework is structured around the key building blocks of the statistical standards – concepts and definitions, methods, classifications and the resulting accounts tables that are produced and published.

1. Alignment framework for the [2025 SNA]/[BPM7]

- 21.96 The [2025 SNA]/[BPM7] alignment framework described below reflects a degree of flexibility and is relatively easy to implement, update and communicate after an initial set-up investment. It is structured around four key high-level components:
- **Concepts and definitions** – reflect the articulation of a macroeconomic activity, interaction, state or ideas. Concepts describe what gets measured.
 - **Methods** – describe how a compiler implements an accounting rule or measures a concept.
 - **Classifications**– determine the level of detail and its conformity or otherwise with the 2025 SNA / BPM7 classification schemes used by compilers and presented to users, for example, by industry, product, region, functional categories or instruments.
 - **Accounts / tables** – outline how information is presented to users. The SNA and BPM have a set of accounts or tables that form the basis of the respective standards, which in turn have been used as the basis of the structure of the alignment frameworks.
- 21.97 These four categories serve as an overarching structure for the alignment frameworks. Given the SNA and BPM have many concepts and definitions, accounting rules, methods, classifications and accounts / tables, to be pragmatic only a subset is expected, in the sense that the individual items to be included in the framework focus on those categories that impact the interpretation and assessment of levels and growth rates. Using these criteria, a brief overview of the [2025 SNA]/[BPM7] alignment framework with a few example questions is shown in **Table 21.6 (with fuller detail available in the LINK)**. Consistent and similar detailed lists have been developed for the [BPM]/[SNA] and future GFSM update. The proposed levels and the categories of alignment provide flexibilities to help economies share details based on the level of development of their national statistical system.
- 21.98 It is worth noting that balance of payments data and SNA Rest of World data may need to be reconciled given there could be two potential data sources presenting essentially the same information from two

different perspectives. Where reconciliation is not made, differences will exist and these would need to be explained.

Table 21.6a Overview of the SNA Alignment Framework with a few examples of the questions [this version for inclusion in the 2025 SNA]

Metadata

| | |
|--|--|
| Last benchmark year for GDP? | |
| Latest period for which balanced SUTs are available? | |
| Latest period for which institutional sector accounts are available? | |
| Do you have a published revision policy? | |

Concepts and definitions, methods, classifications and accounts / tables

| | Fully Aligned | Highly aligned | Broadly Aligned | Partially Aligned | Not Aligned | N/A | Comments |
|---|---------------|----------------|-----------------|-------------------|-------------|-----|----------|
| Concepts and definitions | | | | | | | |
| <i>Units of the economy</i> | | | | | | | |
| <i>Production boundary covers:</i> | | | | | | | |
| <i>Informal economy</i> | | | | | | | |
| <i>Underground economy</i> | | | | | | | |
| <i>Illegal activities</i> | | | | | | | |
| <i>IPPs</i> | | | | | | | |
| Methods | | | | | | | |
| <i>Accounting rules</i> | | | | | | | |
| <i>Valuation</i> | | | | | | | |
| <i>Time of Recording</i> | | | | | | | |
| <i>Sub-annual series are seasonally adjusted</i> | | | | | | | |
| <i>Output and intermediate consumption are deflated by appropriate price indexes at basic prices or at producer prices consistently</i> | | | | | | | |
| <i>Volume indexes are chained-weighted</i> | | | | | | | |

Classifications

| Classifications Standard | Version | Level of Detail | Used for SUTs? (Y/N) |
|--|---------|-----------------|----------------------|
| International Standard Industrial Classification (ISIC) | | | |
| Central Product Classification (CPC) | | | |
| Classification of Individual Consumption by Purpose (COICOP) | | | |

| | | | |
|---|--|--|--|
| Institutional sector, asset and transaction classifications | | | |
|---|--|--|--|

Accounts / Tables

| Category | Timeliness (e.g., T+30 days, T+3 months, etc.) | Granularity (Number of industries or number of transaction lines) |
|---|---|--|
| Annual value added by industry and GDP in current prices and in volume terms | | |
| Annual GDP by expenditure in current prices and in volume terms | | |
| Annual GDP by income in current prices | | |
| Annual sequence of accounts for the total economy (until net lending / borrowing) | | |
| Annual rest of the world accounts (until net lending / borrowing) | | |

Table 21.6b Overview of the BPM Alignment Framework with a few examples of the questions [this version for inclusion in BPM7]

Metadata

| | |
|---|--|
| Do you have a published revision policy? | |
| Is the external accounts revision policy consistent with the national accounts revision policy? | |
| If the answer to the above question is no, are there reasons why not? | |

Concepts and definitions, methods, classifications and accounts / tables

| | Fully Aligned | Highly aligned | Broadly Aligned | Partially Aligned | Not Aligned | N/A | Comments |
|------------------------------|---------------|----------------|-----------------|-------------------|-------------|-----|----------|
| Concepts and definitions | | | | | | | |
| <i>Units of the economy</i> | | | | | | | |
| <i>BOP coverage</i> | | | | | | | |
| <i>IIP coverage</i> | | | | | | | |
| <i>Structure</i> | | | | | | | |
| <i>Functional categories</i> | | | | | | | |
| <i>Sectorization</i> | | | | | | | |
| Methods | | | | | | | |
| <i>Accounting rules</i> | | | | | | | |
| <i>Valuation</i> | | | | | | | |
| <i>Time of Recording</i> | | | | | | | |
| <i>Grossing / Netting</i> | | | | | | | |

| | | | | | | | |
|---|--|--|--|--|--|--|--|
| <i>Investment income obtained directly (rather than estimated)</i> | | | | | | | |
| <i>Direct investment relationships identified by applying the Foreign Direct Investment Relationship (FDIR)</i> | | | | | | | |

Classifications

| Classifications Standard | Name | Version | Level of Detail |
|---|-------------|----------------|------------------------|
| Classification of institutional sectors | | | |
| Earned income account, financial account, and IIP classified according to functional categories | | | |
| Classification of financial assets and liabilities by instrument | | | |
| Classification of services | | | |

Accounts / Tables

| Category | Timeliness (e.g., T+30 days, T+3 months, etc.) | Granularity (level of detail) | Limitations (e.g., any missing lines) |
|---|---|--|--|
| BOP standard components and memorandum items | | | |
| IIP standard components and memorandum items | | | |
| Other flows standard components and memorandum items | | | |
| Reserve-related liabilities | | | |
| Non-performing loans separately at fair value | | | |
| Currency composition of assets and liabilities and institutional sector | | | |

2. Benefits to users and producers

- 21.99 At any given time, it is likely that different countries may be conforming to different editions of the macroeconomic statistical standards or with varying extents of implementation, for example, 1993 SNA or 2008 SNA or 2025 SNA and BPM5 or BPM6 or BPM7. As a result, cross-country data may not be directly comparable because of variations in aspects of the underlying concepts, methodologies and coverage of the data by the different economies. The proposed alignment framework provides a structure for users to assess national statistical practices in a comparable way.
- 21.100 The alignment frameworks bring several key benefits for national users and the international community. The degree of alignment with the macroeconomic statistical standards provides important signals to users about the quality of cross-country comparisons and the extent to which major revisions should be expected in the future, in cases where an economy is not aligned with the latest macroeconomic statistical standards. The alignment frameworks also provide a mechanism to present and communicate this information to users in a standardised manner.
- 21.101 The proposed alignment framework would assist users in making cross-country comparisons. To illustrate, consider two countries A and B. Country A indicates it uses the 2025 SNA to compile its

national accounts and BPM7 for its balance of payments but does not record some of the smuggling activity, neither the stocks nor the flows. Country B also uses the 2025 SNA and BPM7 and records smuggling activity in its national accounts and balance of payments. When comparing the data on gross value added, balance sheets, productivity and the cross-border flows of the two countries, it is important for the user to understand these differences. Country A may not record smuggling because these activities are not material for that economy or it may be material but the compilers may have no data. If it is not material, then Country A should be encouraged to provide this information to users so that they do not attempt to compensate for the different treatment when making the cross-country comparisons.

- 21.102 The alignment information also benefits producers of statistics to identify areas for improvement, prioritise resources and formulate strategic plans to align better to the macroeconomic statistical standards as well as assist users to make appropriate adjustments to achieve comparability in their analyses, among others. In addition, this type of detail will help to give users assurance of the statistics and increase their capacity to provide feedback on future priorities and demands.
- 21.103 It should be noted that the alignment frameworks do not offer a comprehensive evaluation of the quality of an economy's macroeconomic statistics as this would require a more rigorous, and different, type of investigation. It will be expected that the design and application of alignment frameworks will evolve over time.

3. Communicating the alignment framework with users

- 21.104 Having established and completed the alignment framework, it is important how compilers communicate this information to users to ensure it is understood and used appropriately. It should not be used as a form of a scoreboard due to the various flaws in establishing a highly subjective weighting system (e.g., aligning to concepts is, or is not, more important than aligning to accounting rules). Instead, it is recommended that a dashboard approach is taken. Such an approach does not attempt to quantify or summarise the information but will still provide useful information to users in a simple, straightforward and flexible manner.
- 21.105 Many of the items in the alignment framework can be structured to provide a “yes” or “no” response, however this may not deliver the granularity needed by users to properly interpret the results. As the framework is intended to measure the degree of alignment to a standard, it is better to show the notion of “degree” of alignment, for example, for each question or group of questions, the compiler can indicate whether the country is:
- **Fully aligned** with the standard – meaning that between 95-100 per cent of the guidelines and standards are implemented.
 - **Highly aligned** with the standard – meaning that between 75-95 per cent of the guidelines and standards are implemented.
 - **Broadly aligned** with the standard – meaning that between 50-75 per cent of the guidelines and standards are implemented.
 - **Partially aligned** with the standard – meaning that between 25-50 per cent of the guidelines and standards are implemented.
 - **Not aligned** with the standard – meaning between 0-25 per cent of the guidelines and standards are implemented.
 - **Not applicable** – meaning that for issues of materiality or relevance, the standard is not implemented. Materiality in this context is subjective but a steer would be less than 0.05 per cent (and/or a monetary equivalent) of GDP.
- 21.106 The introduction of the notion of “per cent aligned” does introduce some subjectivity and flexibility into the exercise, thus a range approach is adopted as it is difficult to define (and impossible to measure) what would constitute being 100 per cent aligned to a concept, accounting rule, method, etc.
- 21.107 The fully aligned, partially aligned and not aligned categories are appropriate when considering concepts

and definitions, methods, and accounting rules but not when considering classifications used, tables or accounts. It is proposed that the timeliness (days released after the reference period) and granularity (number of detailed classes) be used in “quantifying” the alignment of tables and accounts to a given standard.

21.108 It is recommended that the dashboard be presented in digital format and included as a part of the sources and methods documentation for a given macroeconomic statistical standard. The assessment can be done for the entirety of a macroeconomic statistics or it can be completed for individual accounts or tables. It is also recommended that the assessment be colour coded, which avoids spurious precision and allows easy to understand and quick messages to be conveyed such that:

- Fully aligned = Green
- Highly aligned = Light green
- Broadly aligned = Yellow
- Partially aligned = Light yellow
- Not aligned = Red
- Not applicable = Black

H. Prominence given to indicators other than GDP and the clarification of the use of the term “net”

1. This sub-section will not be included in BPM7

21.109 The role and prominent use of GDP and other gross measures has been well established in the SNA sequence of economic accounts. However, the role and prominence of other indicators as well as net measures in macroeconomic statistics has increased significantly in recent years as users demand an enhanced set of national accounts that better support well-being and sustainability analysis. For example, net domestic product (NDP), net national income (NNI), household disposable income, consumption, saving and net worth, whereby measures of household income and wealth may be disaggregated by type of household and other characteristics, are already available. As signified in **chapter 2**, in some respects, the net measures are more important than the gross counterparts for capturing (environmental) sustainability considerations. Net measures are conceptually preferred as they are more reflective of the actual costs borne in production. However, the measurement challenges make it more difficult to arrive at comparable aggregates across countries.

21.110 Thus, the importance of placing a greater emphasis on net measures and the indicators named above should be reflected in the outputs of the statistical offices. For example, net measures could be presented alongside the gross measures, not replacing but supplementing the gross measures. However, for the purpose of putting greater emphasis on net measures, it is needed to further improve their quality and timeliness.

21.111 The 2025 SNA reflects an improved articulation of the differences in the concepts of depreciation (related to produced assets) and the notion of depletion (mainly related to non-produced assets, particularly natural resources). In the 2025 SNA, both are treated as the costs of production. Thereby the conceptual advantage of using net measures such as NDP and NNI becomes clearer, requiring greater emphasis than previously needed, although users may still be interested in the gross counterparts.

21.112 There are now two components of the gross to net adjustment, for example, from GDP to NDP, i.e., depreciation and depletion. This is a significant change for users to be made fully aware by the way in which the tables are presented. An example to show the distinctions is given in **Table 21.7**. Showing estimates of both components allows users the flexibility to use either version to meet their specific needs.

Table 21.7 Moving from Gross Domestic Product to Net Domestic Product

| • Transaction / Balancing item | • Code | • SNA data set |
|--------------------------------|-------------------------------|----------------|
| • Gross Domestic Product | • B1g | • 1 854 |
| • Depreciation (–) | • P51c (code to be confirmed) | • 222 |
| • Depletion (–) | • P51d (code to be confirmed) | • 14 |
| • Net Domestic Product | • B1g-P51c-P51d | • 1 618 |

21.113 There is also a need to clarify the use of the terms net and gross for both producers and users to avoid confusion. Statistical producers should only use the terms net and gross in the following two areas:

- Firstly, in conjunction with the balancing items for each account by institutional sector and the whole economy, where the difference is due to the costs of depreciation and the costs of depletion.
- Secondly, there are two concepts where the net term is used in financial accounts: (i) aggregating acquisitions less disposals for each financial instrument on the asset side and on the liability side; (ii) aggregating changes in assets and changes in liabilities and showing both on a net basis. Further details covered in **paragraphs 4.268-4.276** ([to confirm]).

21.114 All other uses of the term net tend to be legacies that need to be removed or act as a short-hand description, for example, net exports should be replaced with exports less imports. This has been reflected with the removal of the word net in the examples shown in **Table 21.9**. These and other such terms should be expressed in full to avoid any user confusion or misinterpretation.

I. Use of more understandable terminology for users

21.115 The presentation of macroeconomic statistics can have a significant impact on how the statistics are interpreted and used. The macroeconomic statistical standards depend on an extensive use of technically precise terminology and specialised constructs that may not be widely understood outside of the domain of economic statistics. Indeed, there may be situations where current terminologies are used inconsistently even within macroeconomic statistics.

21.116 Therefore, macroeconomic statistics should be presented and communicated in such a way that the full extent of their analytical usefulness, quality, scope, comparability and policy applications is maximised and reflects the wide user base. To this end, the terminology and branding of the macroeconomic frameworks need an international communication strategy that aligns with the latest technology and current cultural norms.

21.117 The macroeconomic statistical standards have lots of similar technical descriptions of concepts and underlying definitions with explicit inclusions and exclusions. The commonality of the labels and concepts help the producers and facilitate communication across the producers' community. However, they are often not user friendly or understood by users, and it is important that statistical producers target their communication.

21.118 To improve the consistency, readability and understandability for non-specialists, a new feature of the 2025 SNA and BPM7 has been the development of a common glossary of terms and definitions used in macroeconomic statistics. This glossary reflects input from across several existing standards and manuals: SNA; BPM; European System of Accounts (ESA); Government Finance Statistics (GFS); Monetary and Financial Statistics (MFS); System of Environmental-Economic Accounting (SEEA);

International Public Sector Accounting Standards (IPSAS); and guidance from the Bank for International Settlements (BIS). This glossary thus delivers a further level of harmonisation across macroeconomic statistical standards and provides users with a clearer and more consistent understanding of key economic terms and definitions together with some alternative easier to understand terms. **(link to be inserted when available)**

1. Other changes reflected within the [2025 SNA]/[BPM7] This section is likely to appear in one of the Annexes to the 2025 SNA and BPM7 and not in this chapter as appropriate

21.119 Significant steps have been made to harmonise the concepts and methodologies in the macroeconomic statistical standards, in particular within the body of the 2025 SNA and BPM7 without changing the technical definition(s). This effort has also reflected a new Common Glossary of macroeconomic statistics, the alignment of terminologies (affecting variables, account labels, etc.) and improved the branding of the statistical standards such that comprehension and usability of macroeconomic statistics has been improved.

21.120 Examples of other changes agreed affecting the names of the [SNA]/[BPM] accounts are shown in **Table 21.8**.

Table 21.8a Changes to the Names of the SNA Accounts

| 2008 SNA Terminology | 2025 SNA Terminology (Individual economic account) | Economic Accounts Groups |
|--|---|--|
| The production account | No change | Income and Expenditure Accounts |
| The generation of income account | The generation of earned income account | |
| The allocation of primary income account | The allocation of earned income account | |
| The secondary distribution of income account | Transfer income account | |
| The use of income account | No change | Accumulation of Economic Assets Accounts |
| The capital account | No change | |
| The financial account | No change | |
| Other changes in assets account | Other changes in assets and liabilities account | |
| Balance sheets | No change | Balance Sheets |

(needs to be cross-checked / amended against final Editorial Team agreement on Glossary Issue Note discussions)

Table 21.8b Changes to the Names of the BPM Accounts [for BPM]

| BPM6 Terminology | BPM7 Terminology (Individual economic account) | Economic Accounts Groups |
|--|---|---|
| Goods and services account | Goods account / services account | Current account |
| Primary income account | Earned income account | |
| Secondary income account | Transfer income account | |
| Capital account | No change | Capital account |
| Financial account | No change | Accumulation accounts |
| Other changes in financial assets and liabilities account | No change | |
| International investment position | No change | Balance sheets |

21.121 Examples of the changes agreed affecting specific terms in the [SNA]/[BPM] are shown in **Table 21.9**.

Table 21.9 Changes to specific terms [Terms will be included in the SNA / BPM as appropriate]

| Terminology SNA 2008 / BPM6 | Terminology SNA 2025 / BPM7 |
|---|---|
| Accumulation accounts | Accumulation of economic assets account |
| Adjusted disposable income | Disposable income adjusted for social transfers in kind |
| Allocation of (other) primary income account | Allocation of (other) earned income account |
| Balance on goods/services/goods and services | Balance of international trade in goods/services/goods and services |
| Balance of primary incomes | Balance of earned incomes |
| Compensation of employees | Remuneration of employees |
| Constant prices | In volume terms |
| Consumption of fixed capital | Depreciation |
| Distribution of income account | Earned income account |
| Financial intermediation services indirectly measured (FISIM) | Implicit financial services on loans and deposits |
| Financial lease | Finance lease |
| Generation of income account | Generation of earned income account |
| Imputed rental of owner-occupied dwellings | Owner-occupied housing services |

| | |
|---|--|
| Net errors and omissions | Statistical discrepancy |
| Net fees | Fees less service charges |
| Net guarantees | Guarantees less service charges |
| Net (non-life) insurance premiums | Non-life insurance premiums less service charges |
| Net re-insurance premiums | Re-insurance premiums less service charges |
| Net social contributions | Social contributions less service charges |
| Other changes in assets account | Other changes in assets and liabilities account |
| Other changes in the volume of assets account | Other changes in the volume of assets and liabilities account |
| Primary income | Earned income |
| Product balance | Balance of the supply and use of products |
| Purchases less sales of goodwill and marketing assets | Acquisitions less sales of goodwill and marketing assets |
| Redistribution of income account | Transfer income account |
| Redistribution of income in kind account | Social transfers in kind account |
| Resource lease | Natural resource lease |
| Resources | Revenues |
| Secondary distribution of income account | Income transfers other than social transfers in kind account |
| Trade margin | Distribution margin |
| Use of adjusted disposable income account | Use of disposable income adjusted for social transfers in kind account |
| Uses | Expenditures |

DRAFT *BPM7* Annexes will undergo Global Consultation and Committee approvals separately.

