

## 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.*

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





## Chapter 7 Balance Sheet: International Investment Position

<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>									
<i>Insurance, pension, standardized guarantee schemes</i>									
<i>Other accounts receivable/payable</i>									
<i>Other financial assets and liabilities</i>									
<i>Financial derivatives and ESOs</i>									
<b>Total liabilities</b>									
<b>Net IIP</b>									

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*;

Chapter 7 Balance Sheet: International Investment Position

- 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)					By functional category	Liabilities (beginning of period)				
Total economy	Households and NPISHs	General Government	Financial corporations	Nonfinancial corporations		Nonfinancial corporations	Financial corporations	General Government	Households and NPISHs	Total economy
					Direct invest-					
					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)										

## Chapter 7 Balance Sheet: International Investment Position

Transactions from BOP's financial account										
						Changes in as- sets/liabilities due to transac- tions				
Other changes in financial assets and liabilities accounts										
Revaluations (with same breakdown as in Table 7.1)										
						Changes in as- sets/liabilities due to revalua- tions				
Other changes in volume (with same breakdown as in Table 7.1)										
						Changes in as- sets/liabilities due to other changes in vol- ume				
Assets (end of period)					Liabilities (end of period)					
Total econ- omy	House- holds and NPISHs	General Govern- ment	Financial corpora- tions	Nonfinan- cial corpo- rations	By functional category	Nonfi- nancial corpora- tions	Financial corpora- tions	General Govern- ment	House- holds and NPISHs	Total econ- omy
					Direct invest- ment					
					Portfolio invest- ment					
					Financial deriv- atives (other					
					Other invest- ment					
					Reserve assets					
					Total Assets/li- abilities					
					<b>Net IIP (end of period)</b>					

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 entities<sup>3</sup> if the valuation methods for unlisted equity result in such values. With regards to limited liability entities,<sup>4</sup> 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.

---

<sup>3</sup> 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.

<sup>4</sup> 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.

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.<sup>5</sup>

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 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.

---

<sup>5</sup> In case some shareholders are zeroed out while others are not, the latter would only record negative equity proportional to their ownership share.

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 non-

residents. (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)<sup>6</sup> 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. 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

---

<sup>6</sup> 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).

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 impairment<sup>7</sup> 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

---

<sup>7</sup> For a financial asset, a loss in its future economic benefits or service potential.

are available, nonperforming loans is 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,<sup>8</sup> (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.<sup>9</sup>*

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.

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”

---

<sup>8</sup>If 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.

<sup>9</sup>See *Financial Soundness Indicators Compilation Guide 2019*, paragraph 5.94.

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,<sup>10</sup> 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.

### ***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.

---

<sup>10</sup> 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.

### ***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 depend-

ing 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.<sup>11</sup>

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.

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

---

<sup>11</sup>These 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.

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)