IMF Committee on Balance of Payments
Statistics

BPM6 Update Current Account Task Team (CATT)

APPROVED/FINAL VERSION

C.2 Goods, Services, and Investment Income Accounts by Enterprise Characteristics

C.2. Goods, Services, and Investment Income Accounts by Enterprise Characteristics¹

In response to the needs expressed by policymakers, trade analysts, and researchers for more comprehensive and integrated data on international trade and indicators relevant for globalization, the statistical community has undertaken a number of initiatives that would support a better analysis of globalization, including the IMF Committee on Balance of Payments Statistics (Committee) Working Group on Balance of Payments Statistics Relevant to Global Value Chains, Eurostat-OECD Goods Trade by Enterprise Characteristics (TEC), and Services Trade by Enterprise Characteristics (STEC) statistics. In addition, on-going data collections, such as Eurostat-OECD TEC and STEC statistics, could support the breakdown of relevant current account aggregates (goods, services, and investment income) by enterprise characteristics, such as industry, nationality (foreign-owned/domestically-owned), and size. This Guidance Note (GN)² examines these initiatives and recommends an encouraged data collection template that introduces further disaggregation of the imports and exports of goods and services, as well as investment income.

SECTION I: THE ISSUE

BACKGROUND

- 1. At its 2017 meeting, the IMF Committee on Balance of Payments Statistics (Committee) endorsed the creation of a Working Group on Balance of Payments Statistics Relevant to Global Value Chain (GVC) Analysis with the primary objective of identifying components in the current balance of payments framework that are of particular relevance for developing indicators on GVCs and examining—building on initial experiences and ideas of country practices—how to better identify the role of multinational enterprises (MNEs) in current account transactions. A final report by the Working Group—GVC (BOPCOM 19/04), proposing the development of a compilation framework for GVC and a supplementary data collection for MNEs highlighting their role in the current account, was discussed by the Committee at its 2019 meeting. The report reflected the results of a stocktaking survey conducted by the OECD and the IMF among 76 member countries. Even more, as indicated by the report to the UN Statistical Commission in 2020, UNSD has started global data collection on goods trade by enterprise characteristics (TEC) and services trade by enterprise characteristics (STEC), taking into account existing initiatives by OECD and Eurostat.
- 2. Briefly, this Guidance Note (GN) develops a framework to provide supplementary data that highlight the role of enterprises with different characteristics in the current account. This GN builds on the earlier work and discusses a number of issues that would help to operationalize data collection and recommendations to be included in the updated *Balance of Payments and International Investment Position Manual, sixth edition (BPM6)*, particularly those focused on TEC and the STEC statistics.

¹ Prepared by Mr. Rodolfo Ostolaza (OECD), Mr. Gerardo Durand Alcántara (Mexico), Mr. Esmond McLean (Jamaica), and Mr. Casper Winther (Denmark).

² The GN has been revised in light of the discussion at the IMF Committee on Balance of Payments Statistics October 2020 meeting. See the *Summary of Discussions*, which can be accessed <u>here</u>.

- 3. Conventional international trade statistics offer a picture of trade flows between countries, broken down by types of goods and services. While this is an important input for trade analyses, these data do not offer insights into the actors, or the types of enterprises, that are actually engaged in cross-border trade. Policymakers, trade analysts and researchers have called for more comprehensive and integrated data on international trade and globalization. This would help to understand the effect of international trade on growth, economic development, employment, and countries' economic interdependency, which is deepened by economic globalization. Also, the increasing importance of International Trade in Services Statistics (ITSS)—accelerated by digitalization and the development of new services—has led to a growing demand for data on this aspect, particularly STEC statistics.
- 4. There is growing appreciation within the international statistics community that microdata linking provides significant scope to better understand production arrangements in an increasingly globalized economy. New characteristics, notably whether the enterprise is foreign- or domestically-owned, have recently been added to TEC statistics by many countries, and successful efforts have been made to develop similar data for the STEC. Increasingly, efforts are now being made to integrate aspects of TEC and STEC within the heart of the statistical information system, such as structural business statistics and the national accounts and supply-use tables, to provide a holistic perspective on the nature of trade, production, and investment.
- 5. The main objective of the trade statistics by enterprise characteristics (TEC and STEC) is to bridge two major statistical domains which have traditionally been compiled and used separately: business statistics and international trade in services and international trade in goods statistics (ITSS and International Merchandise Trade Statistics (IMTS)). Specifically, this new domain was created to answer questions such as: What kind of enterprises are behind the trade flows of goods/services? What is the contribution of a particular activity/sector to trade? 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 country and the amount of trade value they account for?
- 6. For this purpose, TEC statistics have evolved into a product where the trade in goods between countries is broken down by economic activity, size-class of enterprises, ownership of enterprises, trade concentration, geographical diversification, and products traded. The new information is used to carry out more sophisticated kinds of analysis; for example, to evaluate the role of companies in the context of globalization or to assess the impact of international trade in goods on employment, production and value added.
- 7. Increasing international trade in services is an important component and key driver of economic globalization. Many services have become more tradable due to digitalization, such as health and educational services. Also, many new services have been launched on international markets by means of information and communication technologies (ICT) and digital tools—and some have led to the creation of new markets. Together, STEC and TEC statistics can provide a picture of the trader's activity in international goods and services markets.
- 8. **Quantitative Size of the Issue:** The OECD TEC data highlight that large enterprises continue to dominate international trade in goods, and that, often, those enterprises that are among the most important exporters, are also responsible for the majority of imports. TEC data also provide information on the role of Small and Medium Enterprises (SMEs) in international trade, across industries and across countries, showing, for example, that although SMEs generally export to neighboring markets, they import

from a much wider geographical base. ³ Data show that only a small percentage of the enterprises are actually engaged directly in international trade in goods, typically below 10 percent in OECD countries, with only a few exceptions—notably in small economies such as Slovenia and Estonia.

- 9. The development of STEC has recently been endorsed by the European Statistical System Committee. The most recent release of STEC data by Eurostat⁴ states: Domestically controlled enterprises account for around three quarters of services exports from Denmark, Iceland, and Lithuania. Foreign-controlled enterprises are responsible for most services exports from Luxembourg, Hungary, and Ireland. Eurostat publishes the STEC figures as experimental statistics.⁵
- 10. Current International Standards for the Treatment of the Issue:

UN (2013) International Merchandise Trade Statistics (IMTS): Compilers Manual, Revision 1

UN (2016) Manual on Statistics of International Trade in Services 2010 (MSITS) Compiler's Guide

EUROSTAT (2020) Compilers' Guide on European Statistics on International Trade in Goods by Enterprise Characteristics (TEC)

EUROSTAT (2017) Compilers Guide for Statistics on Services Trade by Enterprise Characteristics (STEC)

ISSUES FOR DISCUSSION

- 11. This GN recommends the development of a template that introduces further disaggregation of the imports and exports of goods and services and the expenditures and receipts from investment income, summarized as a supplementary table. It would be an annual data collection providing supplementary data that highlights the role of enterprises with different characteristics in the current account. Specifically, we propose to examine the possibility of breaking down balance of payments goods, services, and investment income accounts by enterprise characteristics, such as industry, product, ownership (foreign-owned/domestically-owned) and size, to increase the relevance of the current account for the analysis of globalization, including GVCs and MNEs. The integration of TEC and STEC statistics within the conceptual framework of the balance of payments would be the first step in a potential future development by countries of statistics by individual trading partner.
- 12. The suggested economic activity classification is the International Standard Industrial Classification of all Economic Activities (ISIC Rev. 4) at minimum at 2-digit level. OECD presents TEC statistics based on ISIC Rev. 4.0 (OECD, 2020), while Eurostat produces its TEC (Eurostat, 2020) and STEC (OECD & Eurostat, 2017) statistics classified according to NACE Rev. 2, which is the European version of the ISIC Rev 4.0 that maintains the correspondence with the ISIC Rev.4.0.
- 13. Regarding the breakdown by product, the suggested classification for goods is the Central Product Classification 2.1 (CPC 2.1) at 2-digit level as a minimum.⁶ In this regard, the OECD presents TEC statistics by product using the CPC (OECD, 2020), while Eurostat shows data

³ http://www.oecd.org/sdd/its/trade-by-enterprise-characteristics.htm

⁴ https://ec.europa.eu/eurostat/statistics-explained/index.php/Services trade by enterprise characteristics - STEC

⁵ https://ec.europa.eu/eurostat/web/experimental-statistics/stec

⁶ Another possibility could be the use of the Harmonized System at 2-digit level (Chapter) for goods.

disaggregated by Classification Products by Activity (CPA), which is the European version of CPC (OECD, 2020). Concerning services, it is suggested to use the EBOPS 2010, at least at the 12 items level (but preferably with full disaggregation).

- 14. Regarding the ownership breakdown, this GN considers the Eurostat (2020) concept of ownership, which refers "to the concept of control and to the affiliation of an enterprise. It indicates whether an enterprise is domestically or foreign controlled and if it is domestically controlled, whether it has affiliates abroad or not." In this sense, the ownership breakdown proposed in Annex I, which is based on Eurostat (2020) concept, includes:
 - Domestically controlled (in Eurostat: Domestically controlled enterprises).
 - Multinational Enterprises (MNEs) (in Eurostat: Domestically controlled enterprises with own affiliates abroad)
 - Others (in Eurostat: Domestically controlled enterprises without own affiliates abroad)
 - Controlled from abroad (in Eurostat: Foreign controlled enterprises)
 - Unknown (in Eurostat: Unknown)
- 15. The size of enterprise is measured by following the employment criteria and considers the thresholds recommended by Eurostat (2020): Small and Medium-sized Enterprises encompass from 0 to 249 employees; Large Enterprises considers 250 or more employees; and unknown corresponds to the trade value of non-identified traders and of estimated trade.
- 16. The compilation of the additional breakdowns should build on on-going data collections (Eurostat-OECD TEC and STEC statistics), and would, in addition, provide significant improvements to the quality of trade in value added (TiVA) estimates and international integrated economic accounts. Even more, this endeavor should consider already existing national TEC and STEC statistics based on IMTS and ITSS as the main pillar.
- 17. The balance of payments, as an overarching framework, should form the basis for future work involving enterprise characteristics. Only the balance of payments can provide a framework for analyzing the total effects of MNEs' importance in an economy—in a globalized world with multiple modes of international production, cross-border trade in goods, trade in goods that do not cross the border, international trade in services, and the establishment of affiliates abroad are, de facto, substitutes. A holistic framework is needed to fully understand the effects of globalization and the impact of MNEs on a country's economy.
- 18. While the balance of payments statistics identified are part of the current accounting framework and often explicitly referenced in the *BPM6*, they typically involve auxiliary tables or supplementary items or more detailed (geographic or product) breakdowns than those identified as standard components in the *BPM6*. However, the availability and level of granularity required at the

⁷ This definition of control is consistent with direct investment (DI) statistics (*BPM6*, paragraph 6.12a). Namely, the direct or indirect ownership of 50 percent or more of the voting power (normally reflected by ordinary shares) of an enterprise resident in one economy by an investor resident in another economy is evidence of such a relationship (*OECD Benchmark Definition of Foreign Direct Investment, fourth edition, 2008*). Although this GN uses "ownership" and "control" as interchangeable terms, their interpretation follows the DI definitions.

data source level, data quality, compilation cost, confidentiality, and reporters' burden are the main impediments and concerns to data collection.⁸

- 19. This GN proposed to develop a framework for incorporating Trade by Enterprise Characteristics (TEC and STEC) data in the trade in goods and services account by introducing further disaggregation of total exports and imports of goods and services as well as receipts and expenditures for investment income, by nationality and size. Annex I summarizes the proposed framework to provide supplementary data that highlight the role of enterprise characteristics in the current account.
- 20. For this template, precise definitions of MNE and control (Ultimate Investing Country vs Immediate Investor Country) should be elaborated, in line with the work of other Task Teams (TTs). ¹¹ Besides, it would be beneficial to further divide SMEs into independent SME (not a part of a group; i.e., true SME) and those that are part of a group, to try to identify the SMEs that might benefit from capital inputs of affiliated parties. Even more, the criteria to define "SMEs" and "large" enterprises should also be clear and precise. ¹² Further clarification is also needed on partner country since there is no well-defined concept in the *BPM6* (origin/destination or country of consignment/dispatch). With respect to merchanting, the data would need to be aligned with the CATT's work on the GN C.4.
- 21. Finally, we acknowledge that it is not possible to obtain accurate information about enterprise characteristics for the total exports and imports of goods and services due to (among others) thresholds, unit-nonresponse issues, transactions related to illegal and informal activities, and transactions that are based on estimation models (e.g., CIF/FOB adjustment) as well as the implications on other indicators (such as for transport and insurance services from the CIF/FOB adjustment). In consequence, if the underlying data are not collected/available at the enterprise level (e.g., households/government purchases of goods and services) or if the data cannot be linked properly with the business register, they should be registered as "Unknown." This should also be the case for a growing share of goods and services (not only travel services) that are now being purchased directly by individuals, via the e-commerce. If this distinction can be made, it should be noted as an addendum item.

⁸ Annex II paragraphs 1 to 3 discuss compilation methods and issues for TEC ad STEC.

⁹ A presentation of direct investment income by nationality (i.e., based on the residency of the ultimate investor) is being proposed in GN D.6 on DI statistics by ultimate investing economy/ultimate host economy, and pass-through funds.

¹⁰ GN C.4 "Merchanting and Factoryless Producers; Clarifying Negative Exports in Merchanting; Merchanting of Services" recommends including the same template with additional items, required to align the concepts with this GN.

¹¹ The application in this context of the definition of MNEs as proposed by the Globalization Task Team (GZTT), based on the concept of institutional unit and of control as defined in the Framework for Direct Investment Relationships, would ensure broad consistency across different domains notably Foreign Direct Investment (FDI), Foreign Affiliates Statistics (FATS), Activity of Multinational Enterprises (AMNE), etc. This definition was also endorsed by the Direct Investment Task Team (DITT).

¹² SMEs are non-subsidiary, independent firms which employ fewer than a given number of employees. This number varies across countries. The most frequent upper limit designating an SME is 249 employees, as in the European Union. However, some countries set the limit at 200 employees, while the United States considers SMEs to include firms with fewer than 500 employees. https://stats.oecd.org/glossary/detail.asp?ID=3123

22. The framework should be applied, at least, at the total level of exports and imports, as well as for total receipts and expenditures for investment income. However, it should be an encouraged framework that considers the partner, product, and industry dimensions, according to the statistical capabilities of each country. Even more, some countries may have already compiled some of these statistics at aggregated level, while some others will be able to produce the suggested TEC and STEC breakdowns partially. It is also possible that some countries cannot include this disaggregation because of their own confidentiality criteria for disseminating the information, especially at a more granular level. However, the most economically relevant breakdown possible should be considered when publishing these statistics.

SECTION II: OUTCOMES

RECOMMENDATIONS

- 23. This GN considers that the IMTS and MSITS Compilers' guides should include clear guidance for the compilation of TEC and STEC statistics. It proposes to draw on Eurostat's previous efforts on this front. This is reflected in the proposed framework, which is based largely on Eurostat's recommendations (included in the references of this GN).
- 24. This recommendation should be considered in conjunction with several other strands of work, including the relevant CATT GNs (C.1 on Recording transactor-based components of services and C.4), and the other TTs involved in the BPM (DITT—D.5 on Eliminating the Imputations for an Entity Owned or Controlled by General Government that is used for Fiscal Purposes). It should also take into account the ongoing updates of the 2008 System of National Accounts (2008 SNA), particularly the work of the Advisory Expert Group (AEG) Task Team on Globalization Statistics (GZTT), who should be informed on the progress and recommendations on this topic in order to coordinate recommendations and avoid duplication and future discrepancies.
- 25. Further support for the recommendations in this GN comes from a survey conducted by the DITT on various aspects related to MNEs and direct investment. Over 75 percent of respondents indicated that they are able to identify MNEs in their economies, and about a half confirmed that they have the capability to break down trade statistics by foreign-controlled and domestic enterprises through data linking (although work on trade in goods appears more advanced than on services). Breaking down direct investment income by ownership, although more challenging than trade, also appears to be feasible for many countries.

26. Specifically, the GN recommends:

- a. To include enterprise characteristics as part of the annual reporting of the current account, as supplementary items, as presented in Annex I. The balance of payments is the overarching framework and could build on existing TEC/STEC statistics (EU/OECD) and investment income by enterprise characteristics to develop this supplementary framework for the balance of payments.
- b. Regarding the thresholds (on product, industry, size, and ownership classifications), to provide in the Manual some general criteria (as in paragraphs 12–15) but leaving the countries to decide on their own thresholds.

- c. To provide further clarification around classifications and collections, as well as for including the definitions of foreign-owned/domestically owned enterprises in the updated Manual. This initiative may fit appropriately as part of the foreign affiliates trade statistics (FATS).
- 27. Some countries with advanced statistical systems already produce these statistics, so their inclusion into annual balance of payments data submission should be straightforward for them, at least at the most aggregated level. However, for those countries that will face difficulties in developing the proposed breakdown, the Compilation Guide (CG) that accompanies the BPM should offer clear advice and techniques for the linking between the Business Registry and the trade and investment income data. Particular emphasis should be placed on the linking of services trade statistics and linking with investment income data. Also, staged implementation might be considered.
- 28. **Impact on the Current Statistical Standards:** Besides updating the corresponding paragraphs in the BPM, the accompanying CG should include and expand the topic drawing on the work undertaken by Eurostat on these topics. In addition, coordination of efforts should be made to ensure full consistency with the updates of the IMTS, MSITS, and the SNA. Annex III provides a comprehensive overview of all international manuals that need to be updated.

OUTCOME OF THE DISCUSSIONS AT THE OCTOBER 2020 IMF COMMITTEE ON BALANCE OF PAYMENTS STATISTICS MEETING

29. The IMF Committee on Balance of Payments Statistics supported the GN's proposal to include enterprise characteristics as part of the annual reporting of the current account, as supplementary items. The Committee agreed that the updated Manual could provide some general criteria regarding the thresholds (on product, industry, size, and ownership classifications), but the countries should decide on their own thresholds. The Committee noted the need for providing further clarification around classifications and collections, as well as for including the definitions of foreign-owned/domestically owned enterprises in the updated Manual. Further to the Committee's discussion, the CATT liaised with the DITT to further develop details on investment income reporting. The GN has been revised to reflect the discussions and recommendations.

Annex I. Proposed Template to Identify the Role of Enterprise Characteristics in the Current Account

	Encouraged	Encouraged					
	Total	By Trading Partner By Product / Service			By Industry		
		Top 5 Partners	Rest of the World	Top 5 Products	The Other Products	Top 5 Industries	The Other Industries
(S)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							

	Encouraged	Encouraged					
	Total	By Trading Partner By Product / Service			ct / Service	By Industry	
		Top 5 Partners	Rest of the World	Top 5 Products	The Other Products	Top 5 Industries	The Other Industries
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							

	Encouraged Total	Encouraged					
		By Trading Partner By Product / Service			By Industry		
		Top 5 Partners	Rest of the World	Top 5 Products	The Other Products	Top 5 Industries	The Othe
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							

Annex II. Supplementary Information

REFERENCED DOCUMENTS

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COMPILATION METHODS AND ISSUES

- 1. **TEC** statistics break down international merchandise trade statistics (IMTS) by the characteristics of the trading enterprise. The data are generally produced by national statistical authorities through the linking of microdata from the census of customs transactions (used for compiling IMTS) with a centralized business register containing both characteristics and reporting structure of all enterprises operating within that national boundary. Depending on the level of granularity needed, it may be necessary to link data at the level of individual business establishment, for example, for data by detailed industry (e.g., needed for producing Extended Supply and Use Tables) or by subnational geography (e.g., by state, metropolitan region, or city). This microdata linkage for TEC is facilitated by the possibility of using (or developing) common identifiers (e.g., a tax identification number) between the trade register and the business register, which also means that TEC statistics can be compiled without imposing additional burden on respondents.
- 2. For STEC, it is worth noting that the statistics on international trade in services is often compiled from multiple data sources, using models and estimations, unlike the international trade in goods statistics, which is often based on customs trade data. In that sense, STEC compilation might be a big challenge for several countries, even more if we consider the difficulties to compile

partner-countries' distribution for the few main types of services. Due to the nature of some services, it might not be possible to link data directly to an enterprise. The issues with non-linkable data should be addressed during the discussion of this GN. Nevertheless, this new set of indicators will be invaluable in policy terms, even more considering the current state of globalization and integration.

3. Even more, for practical reasons, inside the same enterprise, the unit responsible to report the Customs transactions might not be the same unit that is producing the product. Reallocation of the trade to the unit that is most likely responsible for the production is then made by the statistical agency, but this exercise requires a lot of efforts and resources. This could be taken into account when considering staged implementation of the current proposal.

Annex III. List of Manuals to Update

STATISTICAL MANUAL

IMF (2009) Balance of Payments and International Investment Position Manual, sixth edition

IMF (2009) Balance of Payments and International Investment Position Manual, sixth edition, Compilation Guide

UN (2013) International Merchandise Trade Statistics: Compilers Manual, Revision 1

UN (2010) Manual on Statistics of International Trade in Services 2010

UN (2016) Manual on Statistics of International Trade in Services 2010 Compiler's Guide

EUROSTAT (2020) Compilers' Guide on European Statistics on International Trade in Goods by Enterprise Characteristics (TEC)

EUROSTAT (2017) Compilers Guide for Statistics on Services Trade by Enterprise Characteristics (STEC)

OECD (2008) OECD Benchmark Definition of Foreign Direct Investment, fourth edition.