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**Towards an Update of the Balance of  
Payments and System of National Accounts  
Manuals: How Can We Effectively Deal  
with Globalization and Multinational  
Enterprises in Macroeconomic Statistics?**

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# Introduction

1. **Globalization—the economic integration of economies around the world—adds complexities to the traditional interrelations between economies.** Better accounting for globalization was a major part of the last update of the *Balance of Payments and International Investment Position Manual, 6th edition* (BPM6), and *2008 System of National Accounts* (2008 SNA). A decade after their publication, the conceptual framework of the international standards remains robust, but since their publication, further guidance has been developed to assist national statistical compilers.<sup>2</sup> With the backdrop of the wealth of additional guidance and the continuous, fast-evolving economic and financial integration, it necessary to review the conceptual framework and provide further guidance in the statistical standards to meet user needs.
2. **The decision to update the *BPM6* and *2008 SNA*, was made in the context of such progressive economic and financial integration.** At the heart of the statistical challenges are activities of multinational enterprises (MNEs), profit shifting, the growing importance of intangible assets, innovative cross-border payments, intellectual property rights, and special purpose entities (SPEs). As part of the research agenda leading to the release of revised manuals scheduled to take place in 2025, IMF Committee on Balance of Payments Statistics (BOPCOM) and Intersecretariat Working Group on National Accounts (ISWGNA)<sup>3</sup> have set up several task teams to research high priority issues for the next update.<sup>4</sup> In this context, the ISWGNA set-up a Globalization Task Team (GZTT), which is responsible for developing guidance notes on the treatment of MNEs and SPEs in the international standards, in consultation with the Advisory Expert Group (AEG) on National Accounts<sup>5</sup> and related task teams created under the aegis of BOPCOM.

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<sup>2</sup> United Nations Economic Commission of Europe (UNECE), 2011, “The Impact of Globalization on National Accounts” and UNECE, 2015, “Guide to Measuring Global Production”. Building on these initiatives, the United Nations Statistical Commission (UNSC) Expert Group on International Trade and Economic Globalization Statistics developed a Handbook on Accounting for Global Value Chains, which addresses the GVC-related classifications and the economic dimensions of trade and globalization as an extension of the 2008 SNA. The IMF Committee on Balance of Payments Statistics (BOPCOM) have undertaken much work in this area and have published in-depth discussions on challenges associated with economic ownership, transfer-pricing, residence, intellectual property products, and SPEs, and the measurement of trade finance.

<sup>3</sup> The ISWGNA received its mandate from the United Nations Statistical Commission. Part of its mandate is to provide strategic vision, direction and coordination for the methodological development of the SNA and to revise and update the SNA. <https://unstats.un.org/unsd/nationalaccount/iswgnaAbout.asp>

<sup>4</sup> Annex 1 presents an overview of the current update process in place.

<sup>5</sup> The aim of the AEG is to assist the ISWGNA in resolving issues on the research agenda of the SNA and emerging research issues. <https://unstats.un.org/unsd/nationalaccount/aeg.asp>.

3. From a statistical perspective, when looking at MNEs and SPEs, one is confronted with several challenges, of which:

- **MNEs and their global arrangements.** How do these enterprises behave, and why? What are the reasons behind the division of activities and the subsequent allocation of these activities to different economies? Global tax optimization reflects a macroeconomic reality of globalization. Aggressive corporate tax arbitrage is a key factor behind MNEs' strategies to expand their structures globally to jurisdictions with low or zero corporate income taxes, and to avoid withholding taxes they also involve conduit entities in countries with favorable tax treaties. Furthermore, MNEs organize global production strategically to leverage lower labor costs, contract manufacturers, more friendly regulatory environments, more educated workforces, among other factors.
- **MNE's strategies to maximize profits for their shareholders.** Cross-border mobility of corporate assets, in particular intangible assets such as intellectual property<sup>6</sup>, the ability to easily change the legal domicile of a firm to another country, and other activities, such as transfer pricing and intra-group services, as part of a group-wide strategy to maximize profits can make the true location of production ambiguous.
- **MNEs activities fully captured.** Ensuring that all activity of an MNE is captured, not duplicated, and properly allocated by economic territory is a statistical challenge since statistical compilers do not view the MNE as a single entity. Many countries do not have access to the data of nonresident entities.
- **MNEs using SPEs.** With increasing globalization, SPEs have evolved beyond investment or pass-through activities to manage intellectual property rights, research and development, trade, and other activities as part of MNEs' group-wide financial and profit-maximization strategies.

4. **Among key challenges are how MNEs impact measurement, quality and interpretation of traditional macroeconomic statistics.** Which statistics fulfil the needs for effective policy analysis? Which indicators help users better understand the impact of globalization on economies? How can compilers of national statistics address those ongoing challenges and provide policy relevant and analytically useful statistics?

5. **This paper discusses the statistics needed for effective policy analysis and the implications for the update of the international statistical standards.** The paper draws heavily on the discussions taking place within the GZTT and what statistical compilers can do to meet these policy needs. Section 1

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<sup>6</sup> In the 2008 System of National Accounts (SNA), four types of produced intellectual property products (IPPs) are recognized: (i) research and development; (ii) mineral exploration and evaluation; (iii) computer software and databases; and (iv) entertainment, literary or artistic originals. The 2008 SNA also recognizes an "other intellectual property products" as a not elsewhere classified category but does not provide any guidance as to what is included in this category. The Eurostat-OECD Task Force on Land and Other Non-financial Assets – IPPs found that countries rarely include anything in this category.

briefly describes the activities of MNEs and how they affect the statistics. Section 2 focuses on what statistics are needed from the user perspective. Section 3 provides an overview of the international response and section 4 discusses what national statistical compilers can do to assist in the response to meet these user needs. Section 5 concludes with a look towards the future for the international statistical standards.

## Activities of MNEs and measurement challenges

6. **MNEs are key players in globalization.** The aim of MNEs –firms that have established affiliates or subsidiaries abroad <sup>7</sup> – is to take advantage of worldwide tax minimization while maximizing overall profits for their shareholders, not necessarily their profit in each of the countries in which they operate. In the upsurge of multifaceted and flexible MNE structures, SPEs, created by the latter, have also grown significantly both in number and complexity. MNEs, in fact, organize global production strategically to leverage lower labor costs, contract manufacturers, more friendly regulatory environments, more educated workforces, and low-tax or no-tax jurisdictions, among other attractive factors. MNEs are key players within global value chains (GVCs) through their use of foreign affiliates and contract manufacturers. Furthermore, MNEs often arrange for a wide variety of services to be shared within the group, or intra-group services. Such arrangements depend on the organizational structure of the group and the kind of business but in general they may include services such as planning, coordination, budgetary control, financial services and advice, accounting, auditing, legal, computer services, buying, distribution, marketing, human resources, and research and development (R&D) centers.

7. **Increasing integration of the global economy, implies growing tension between the nature of economic activity and its measurement system.** Associated with MNEs' arrangements and their global organizational structure are measurement challenges. MNEs have exposed difficulties in understanding national statistics arising from (i) the allocation of production or income based on economic territory and residence of institutional units; (ii) valuation of transactions assigned on transfer pricing; (iii) the difficulty of accounting for the economic ownership and use of intangible assets; and (iv) the use of SPEs with a legal status but hardly any physical presence.

8. **In compiling macroeconomic aggregates, statisticians employ the concepts of residence and economic ownership when determining economic transactions and other flows.** Residence is the economic territory in which an institutional unit– the most fundamental unit of observation– has a center of predominant economic interest. This is generally defined in the international standards as a location, dwelling, place of production, or other premise on which or from which the unit engages and intends to continue engaging in economic activity (taken to be one year or more) and transactions. Transactions and

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<sup>7</sup> MNEs are the result from a decision to invest abroad. MNEs operational structure consists of affiliates of an enterprise group, that are, based on the concept of control by their parent. *BPM6* (and OECD's *BD4*) defines direct investment based on control (50% or more of ordinary shares or voting power), as guided by the concept of the framework for direct investment relationships. For further details see Chapter 6, section B in *BPM6*, and annex 4 of the OECD's *BD4*.

other flows are recognized when economic ownership transfers from one institutional unit to another and are attributed to the economy where the institutional unit is resident.<sup>8</sup>

9. **MNEs stand at the center of all channels of globalization – trade, direct investment, other cross-border flow of funds, international transfer of knowledge and technology – such that it is challenging to disaggregate MNE production activities and balance sheets on a country-by-country basis.** Lipsey (2010) argues that shared inputs, such as intangible capital and some services, impose a challenge under the residence concept because returns to shared inputs may be attributed anywhere in the world and may result in transactions that lack economic substance. Modern production often uses intangible capital and it can be a significant source of value creation. Determining which unit (and country) is the economic owner of intangible capital inside an MNE is difficult because once IPPs are produced their ownership and use are not easily observed. In other words, where IPPs are produced, used, and owned do not necessarily occur in the same country. It affects our ability to measure domestic production in an economically meaningful way when the location of moveable assets, such as intangible capital, can be readily shifted from one country to another. This may generate questionable results for some core macroeconomic statistics, such as gross domestic product (GDP).

10. **There can be a misalignment between the location where the MNE records its financial transactions and the actual location of production and operations.** The use of artificial transfer pricing (i.e., the non-market price at which related parties of the global MNE transact with each other), use of overseas billing locations, or other intra-firm accounting practices has increased the complexity of compiling macroeconomic statistics. This poses challenges to national statistical compilers because they often have the disadvantage of viewing the transaction only from their domestic perspective and not from the perspective of the total MNE.

11. **Transfer pricing, a strategy used by MNEs to alter the prices of intra-group transactions in order to shift profits to low tax regions, can cause measurement distortions in macroeconomic statistics.** To remedy this, international tax guidelines have tried to enforce an arm's length principle (i.e., the amount charged by one related party to another for a given good or service must be the same as if the parties were not related, i.e. a market price must be charged). The use of the arm's length principle is an attempt to provide a consistent basis for determining the income and expenses– and therefore profit– of a company or permanent establishment<sup>9</sup> that is part of an MNE group that should be considered within a tax jurisdiction. Such guidelines have been developed to help avoid the taxation of the same item of income by more than one tax jurisdiction. Such double or multiple taxation can create an impediment to

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<sup>8</sup> The economic owner of entities such as goods and services, natural resources, financial assets and liabilities is the institutional unit entitled to claim the benefits associated with the use of the entity in question in the course of an economic activity by virtue of accepting the associated risks. (2008 SNA paragraph 3.26)

<sup>9</sup> A permanent establishment is a fixed place of business which generally gives rise to income or value-added tax liability in a particular jurisdiction. The term is defined in many income tax treaties and in most European Union Value Added Tax systems.

cross-border transactions in goods and services and the movement of capital.<sup>10</sup> However, despite these guidelines, MNEs have leeway because intra-group transactions often consist of specialized components or intellectual property where it can be difficult to establish a market price.

12. **MNEs may not record transactions for the intra-MNE use of intellectual property products.**

Because intellectual property products- such as R&D and software- can be used throughout the MNE simultaneously- their use may not necessarily be seen through an explicit transaction. Therefore, there is a blurring of the line between payments for the use of intellectual property (treated as payments for services) versus direct investment income. For example, an affiliate may pay for the use of the intellectual property explicitly through royalties or license fees, or implicitly through higher direct investment payments. If the latter, the value added of the affiliate is overstated.

13. **MNEs have also used corporate inversions as a strategy to maximize their world-wide profits.**

A corporate inversion occurs when an MNE restructures itself by redomiciling their headquarters to an overseas location. MNEs that receive a significant portion of income from foreign sources may employ corporate inversions as a strategy to maximize their profits for shareholders. MNEs undertaking this strategy are likely to select a country which has a lower tax rate and less stringent corporate governance requirements than their home country. While technically meeting the criteria for direct investment, corporate inversions are undertaken for different reasons than traditional direct investments and, in most cases, do not appear to bring the same benefits to the host economy as traditional direct investment. In essence corporate inversions lead to large transactions being recorded when there is in fact very little change in the real operations of the MNE.

14. **MNEs also create more complex financing structures due to the aim of minimizing tax and regulatory burdens in the context of mostly international capital markets.**

These complex structures often involve the use of SPEs to channel investments through several countries before reaching their final destinations. While tax legislations providing tax benefits and legal protection have been key drivers for incorporating SPEs in financial centers, financial innovation and globalization have spurred the number of SPEs as well as the nature of their business.

15. **With increasing globalization, associated with the multifaceted MNEs, SPEs have evolved beyond those structures anticipated in the current recommendations of statistical manuals.**

SPEs are playing roles beyond those originally typically set up by financial institutions, and mostly involved in securitization. Nowadays, in addition to investment or pass-through activities, SPEs are set up to manage intellectual property rights, research and development, trade, and other activities as part of MNEs' group-wide financial and profit-maximization strategies.

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<sup>10</sup> The United Nations Model Double Taxation between developed and developing countries [https://www.un.org/esa/ffd/wp-content/uploads/2014/09/UN\\_Model\\_2011\\_Update.pdf](https://www.un.org/esa/ffd/wp-content/uploads/2014/09/UN_Model_2011_Update.pdf) and OECD Model Tax Convention on Income and Capital <https://www.oecd.org/tax/treaties/model-tax-convention-on-income-and-on-capital-condensed-version-20745419.htm>

16. **SPEs' activities, alike MNEs, present several challenges for macroeconomic statistics.** While SPEs are legal entities that are typically located in jurisdictions other than where their parent enterprises are located, the economic relevance of SPEs in terms of their contribution to GDP in the country in which they are located (the host country) tends to be small, although now there are more non-financial SPEs that may have production in the host economy. SPEs also have large cross-border financial stocks and flows associated with large income flows. Cross-border activities of SPEs, when recorded, present challenges for national economic statistics.

17. **As a result of these practices, macroeconomic statistics such as GDP, international trade in goods and services, and direct investment and other financial flows and positions may become less meaningful because they do not properly show the linkages between economic territories.**

Estimates of GDP may be distorted because there may be a misallocation between international trade in goods and services versus income flows. Policymakers that solely rely on GDP are only seeing part of the economic picture. For example, to the extent that MNEs overstate or understate the economic value of a transaction through non-market transfer prices, there is a misallocation between statistics on international trade in goods and services versus statistics on income. As an illustration, if a parent company in a high-tax country sets an artificially low price on its exports of intermediate goods to an affiliate in a lower-tax country and an artificially high price on its overseas affiliate's exports of final goods back to the parent, it will artificially lower exports, raise imports and lower GDP in the higher-tax country (and artificially raise GDP in the low-tax country).

18. **Reforms to international tax rules to address tax-avoidance schemes may also help address statistical measurement issues.** Initiatives such as the Organization for Economic Cooperation and Development (OECD) Base Erosion and Profit Shifting (BEPS) emerged to put an end to tax avoidance strategies that exploit gaps and mismatches in tax rules to avoid paying tax. Under BEPS Action 13<sup>11</sup>, all large MNEs are required to prepare a country-by-country (CbC) report with aggregate data on the global allocation of income, profit, taxes paid and economic activity among tax jurisdictions in which it operates. This CbC report is shared with tax administrations in these jurisdictions, for use in high level transfer pricing and BEPS risk assessments. The implementation of these measures may eliminate or reduce such tax avoidance strategies.

## What are the emerging user needs?

19. **User needs point to an emphasis on data beyond GDP.** The following section discusses user needs in better explaining certain aspects of globalization. The key needs are a move to emphasize national income measures, indicators on interconnectedness (such as extensions that go beyond the current conceptual framework such as trade in value-added (TiVA)) and more information related to cross border investment flows.

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<sup>11</sup> <https://www.oecd.org/tax/beps/beps-actions/action13/>



20. **It is important to have a reliable indicator of the income of an economy for private-sector decision making, fiscal planning, and the sustainability of government and private debt stocks.**

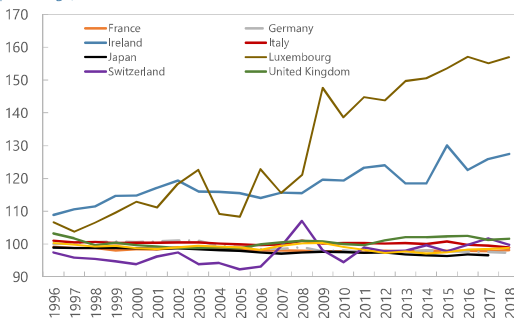
Polymakers and analysts point to the need for a reliable estimate of the income available in a country to meet certain fiscal goals such as government deficit and the sustainability of government debt. Often GDP is used as a denominator, but is it always the most appropriate indicator?

21. **GDP is the standard measure of the value added created through the production of goods and services in a country.** Equivalently it measures the income earned from that production, or the total amount spent on final goods and services (less imports). Given that GDP measures aggregate production in the economy, it inevitably and correctly plays a central role in discussions about monetary and fiscal policy and about the state of the economy generally. Yet, other measures better reflect certain aspects of the economy, in particular for open economies impacted by globalization aspects– it is better to use indicators of the income available for residents in an economy.

22. **Relative to GDP, gross national income (GNI) is a superior indicator of the size of an economy for some purposes (figure 1).** GNI measures the income earned by the residents of a country, whether generated on the domestic territory or abroad. Gross national income (equal to GDP plus net receipts of primary income<sup>12</sup> from the rest of the world) is less affected than GDP by globalization aspects because earnings of MNEs reflect income from foreign affiliates (including reinvested earnings)<sup>13</sup> and income of domestic affiliates of foreign MNEs are subtracted.

**Figure 1. GDP as a percent of GNI**

**GDP as a percentage of GNI**  
(percentage)



Source: OECD, data.oecd.org

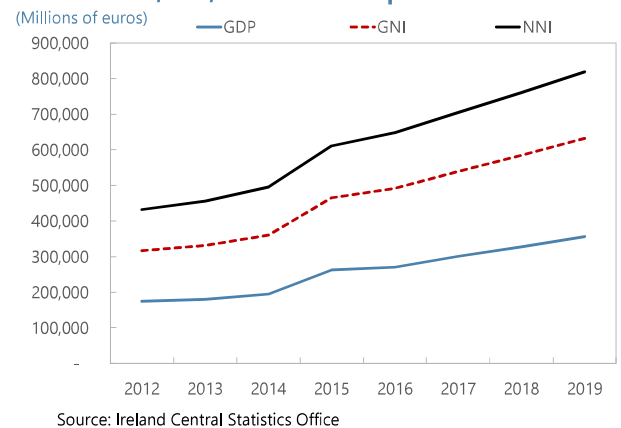
23. **In many countries, net receipts of property income, which includes the activities of MNEs, is a major contributor to the difference.** While the difference between GDP and GNI is not significant for some countries, it can be very significant for open economies affected by globalization

<sup>12</sup> Cross-border primary income flows consist of net receipts from abroad of wages and salaries, property income (e.g., interest, dividends and all or part of the retained earnings of foreign enterprises owned fully or in part by residents), and net taxes and subsidies receivable from abroad.

24. **GNI can also be impacted by certain aspects of globalization.** The ease with which MNEs can restructure and shift movable corporate assets to another country can affect GNI. One of the most striking examples occurred in Ireland in 2015 (see figure 2). Associated with MNE restructuring part of their balance sheet to Irish enterprises, a large amount of transborder IP assets and the associated output (some of which involve Irish enterprises use of contract manufacturers, including those domiciled outside Ireland, to produce final products using the IP assets) and related income flows were shifted to Ireland and gave rise to a level shift in the economy— a 35 percent increase in nominal GDP (and a corresponding increase in real GDP of 25%) and a 23 percent increase in GNI in 2015. Yet because there were large depreciation charges associated by 7 percent in 2015. NNI may be a more appropriate measure of income available to citizens in countries with large outflows of property income and depreciation charges.<sup>14</sup>

25. **Recognizing the need to meet user needs for insight into Irish economic activity, the Irish Central Statistics Office (CSO) convened the Economic Statistics Review Group (ESRG)<sup>15</sup> to bring a broader dimension to its deliberations on the challenges of globalization.** The ESRG report (2016)<sup>16</sup> noted that while it has long been understood that GNI provided a superior indicator of the underlying size of the Irish economy than GDP, the GNI measure is no longer completely satisfactory due to the impact of international asset transfers and corporate inversions. Based on the ESRG report’s recommendations, GDP and GNI will remain the key international standard indicators, but new analytical presentations and supplementary statistics should be made available to users. Examples of supplementary statistics recommended include institutional sector accounts and the breakdown of economic activity by MNE-dominated and indigenous (domestic) sectors.

**Ireland’s GDP, GNI, and NNI: a Comparison**

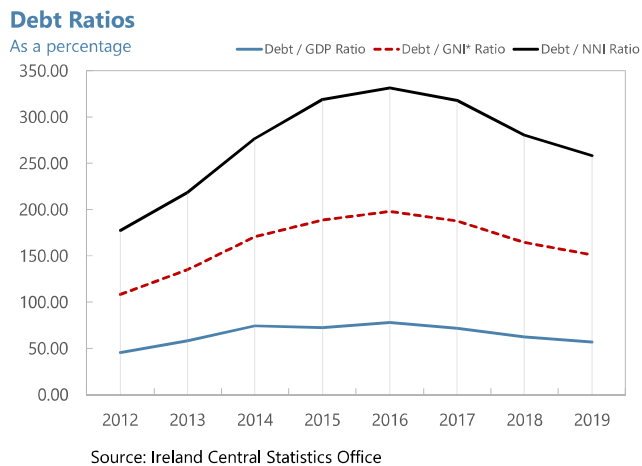


<sup>14</sup> Net national income accounts for the depreciation charges of both domestically controlled and foreign controlled units.

<sup>15</sup> The ESRG included policymakers, analysts, regulators, business and trade union representatives, academics, and the international statistics community represented by Eurostat and the IMF.

<sup>16</sup> <https://www.cso.ie/en/csolatestnews/eventsconferencesseminars/resrg/>

**Figure 3: Debt ratios to GDP, GNI\* and NNI in Ireland**



Furthermore, additional analytical indicators were recommended such as a modified GNI (GNI\*) which excludes the impact of certain aspects of globalization namely the retained earnings of corporate inversions (i.e., re-domiciled firms) headquartered in Ireland and depreciation of foreign-owned domestic capital assets<sup>17</sup>. GNI\*, a level indicator, is for use primarily as a denominator in ratio analysis, and as an alternative or to complement the use of GDP. Figure 3 compares the debt ratios

using GDP, GNI\*, and NNI.<sup>18</sup>

26. **The restructuring of MNE balance sheets and associated output to Irish enterprises in 2015 highlighted the issue of measuring GDP, gross national income, and productivity— but it is not a unique case.** Especially in small open economies, changes in organizational structures through transfers of high value IP assets or through other mechanisms, such as by transferring trading or management and contracting responsibilities of GVCs, can have visible effects on measured GDP, income and productivity. This reinforces the need for supplemental data on the value-added generated by foreign controlled versus domestically controlled units.

27. **Policy demand for more statistical information on GVCs has also grown significantly in recent years.** While it is argued that the growing fragmentation of production within GVCs has been driven by MNEs, empirical evidence on MNEs is not widely available. OECD (2018) provides an overview of the evolution of the trade-investment nexus and states that “the current evidence base is not detailed enough to analyze the trade-investment nexus within GVCs”. A deeper and wider review of MNE activity should be sought in the next update to the international standards. The further breakdown of the current account to better highlight MNE activity should be considered in the next update to the international standards. Furthermore, investigation of whether other components useful for highlighting MNE’s activities—such as retained earnings of MNE portfolio investors, intragroup transfers of IPPs and intragroup trade— prompted calls for exploring the possibility of introducing a sub-sectorization

<sup>17</sup> This is the depreciation related to both the cross-border additions to the stock of IP assets and the stocks of aircraft involved in international aircraft leasing for Ireland.

<sup>18</sup> From the perspective of Ireland’s external financial position, the balance of payments (BOP) and the international investment position (IIP) has also been affected by the international transfer of capital assets owned by foreign MNEs and the international income flows associated with re-domiciled firms. Adjustments for these elements need to be identified so that supplementary BOP/IIP measures can provide useful indicators of potential domestic imbalances.

distinguishing between domestic MNEs that have affiliates abroad, foreign controlled enterprises and other domestic enterprises, which re-joins the idea of adding subsectors to the current framework.

28. **Looking at trade from a value-added perspective provides a better understanding of how upstream domestic industries contribute to exports and how MNEs' fragmented production affects international trade and value added.** As GVCs continue to develop, the IMF's World Economic Outlook (April 2019) points to the increased importance of differentiating between gross bilateral trade balances (exports minus imports from the same country) and value added (i.e., the value each country adds in the production of goods and services that are consumed worldwide) bilateral trade balances. The development of Trade in Value-Added (TiVA) by the OECD and the World Trade Organization (WTO) partly addresses this issue by considering the value added by each country in the production of goods and services that are consumed worldwide. Using OECD TiVA indicators<sup>19</sup>, figure 4 shows the foreign value added as a share of gross exports for manufacturing in a number of economies for 2016.

**Figure 4. Foreign Value Added as a Share of Gross Exports (Manufacturing) for Select OECD and Non-OECD member countries (2016)**

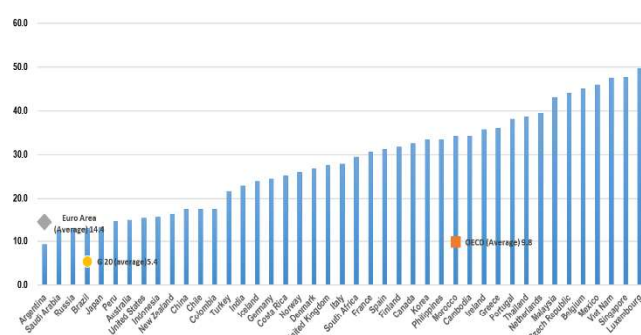


Figure 4 shows that typically in larger countries, the foreign value-added content is lower, partly reflecting the scale and cost of domestic production. In countries such as China, Colombia, and Germany between 18 and 25 percent of exports reflect foreign content. For Mexico, the figure is much higher, with about 45 percent of their exports reflecting foreign content, showing the fragmentation of global production.

Source: OECD TiVA database

29. **Challenges associated with cross-border investment statistics include the measurement of direct investment, SPEs, pass through funds, and the relationship between investment income and positions.** There has been an ongoing growing demand from users to separately identify SPE activities so that market analysts and policy makers are better able to analyze cross-border interconnectedness and to understand the associated risks. Damgaard and Elkjaer (2017) underscored how the strong SPE presence in certain economies is an important reason for decoupling genuine direct investment (DI) from other SPE-associated flows and stocks. Blanchard and Acalin (2016), in their analysis, showed that net DI inflows and outflows are highly correlated, suggesting that “measured” DI gross flows may reflect flows through rather than to the country.<sup>20</sup> Milesi-Feretti and Tille (2011) recognized that lack of adequate cross-border

<sup>19</sup> TiVA indicators are designed to better inform policy makers by providing new insights into the commercial relations between nations. <https://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm#access>

<sup>20</sup> Based on data for 25 emerging market countries, Blanchard and Acalin (2016) find a surprisingly high correlation between quarterly DI inflows and outflows and conclude that “measured FDI flows are quite different from true FDI flows and may reflect flows through rather than to the country, with stops due in part to (legal) tax optimization.”

statistics on SPEs hampered the assessment of the retrenchment in cross-border capital flows caused by the global financial crisis in a context of intense global financial integration.

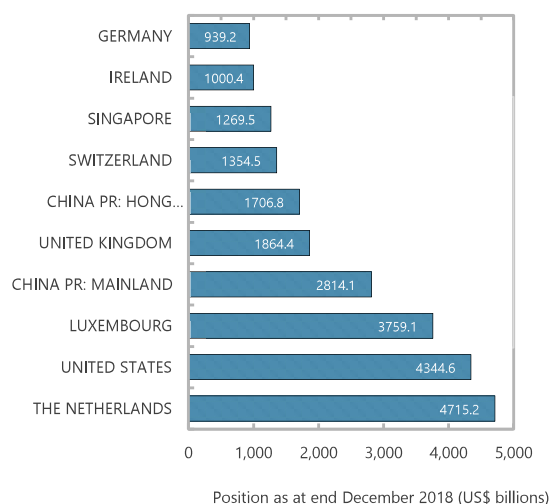
30. **The availability of balance of payments and international investment position statistics with and without SPEs would provide a better geographic distribution of DI for economies.** In SPEs host jurisdictions, in particular, with SPEs included in cross-border statistics, it can appear they are receiving substantial investment from countries, when those investors are just passing capital ultimately directed to third countries. In the absence of official cross-border data from most offshore financial centers, alternative estimates had to be constructed from a variety of sources (Lane and Milesi-Ferretti, 2011, and 2018).

31. **The significant role of SPEs as intermediate steps towards DI and portfolio investment positions is evidenced in the IMF's Coordinated Direct Investment Survey (CDIS) and Coordinated Portfolio Investment Survey (CPIS) data.** The latest CDIS data, as at December 2018, show that both large and small economies in which SPEs have traditionally been located are among the main originators and recipients of DI investment (see Figures 5a and 5b, below). Countries like Luxembourg, Netherlands, and Switzerland are portrayed as origin and destination for DI, while for the most part they only have an intermediating role.

**Figures 5a and 5b. Direct Investment Positions**

**Inward Direct Investment:**

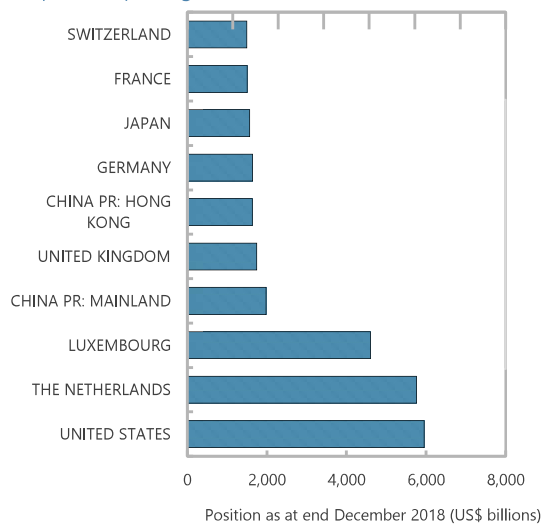
Top Ten Reporting Economies in the World



Source: CDIS database, [www.imf.org](http://www.imf.org).

**Outward Direct Investment:**

Top Ten Reporting Economies in the World

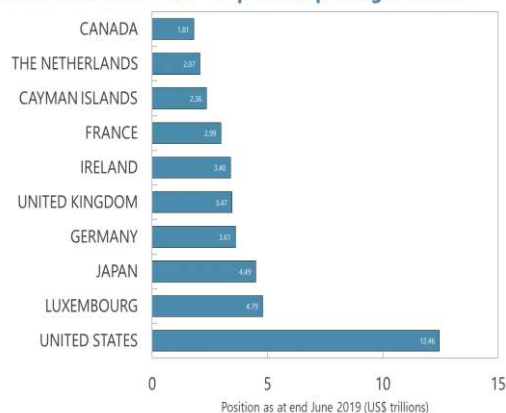


Source: CDIS database, [www.imf.org](http://www.imf.org).

32. **CPIS-derived liabilities reveal the same picture.** The data show that the top ten investor and investee economies include major SPE-hosts like Luxembourg, Cayman Islands, and the Netherlands (Figures 6a and 6b) as of end June 2019.

## Figures 6a and 6b. Portfolio Investment Positions

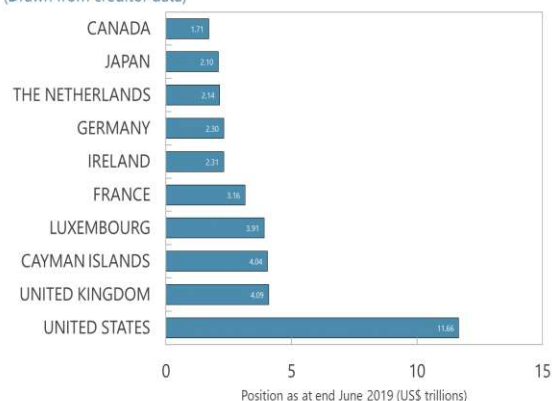
**Total Portfolio Assets - Top Ten Reporting Countries**



Source: CPIS database, www.imf.org.

**Derived Total Portfolio Liabilities: Top Ten Economies**

(Drawn from creditor data)



Source: CPIS database, www.imf.org.

## What progress has been made since the last update of the international statistical standards?

33. **Globalization places continuous demands on statistical methodologists and compilers.** As the economic and financial systems evolve, information needs change. Avdjiev et al (2018) note that “as the global economy becomes more integrated, there is a growing tension between the nature of economic activity and the measurement system that attempts to keep up with it.” Moreover, as noted by Heath & Bese Goksu (2016), “looking back in history, crisis events have always acted as triggers to question the nature, quality, and availability of data needed for policymaking.” The recent debate on the measurement challenges associated with the current statistics on MNEs has put forward the need to come up with additional response from the international statistical community. Without being fully exhaustive, the next section briefly highlights some of the international data initiatives that have been put in place or are being contemplated.

## INSTITUTIONAL SECTOR ACCOUNTS

34. **The Institutional Sector Accounts (ISAs) framework shows the full sequence of accounts by institutional sectors<sup>21</sup> instead of the familiar breakdown by economic activity (industrial breakdown).** The ISAs also provide coherent and consistent granularity that extends beyond GDP- from gross value added to net lending and borrowing. They include both financial and non-financial flows and balance sheet data. A stronger emphasis has been put on the compilation of ISAs since the 2008-2009 Global Financial Crisis and is part of the second phase of the G20 Data Gaps Initiative-2 (DGI-2). Data gaps

<sup>21</sup> The institutional sectors are Total economy (S1), Nonfinancial corporations (S11), Financial corporations (S12), General government (S13), Households (S14), and Nonprofit institutions serving households (S15), and Rest of the world (S2)

are understood to limit the ability of policymakers and market participants to assess financial stability risks and economic developments in a timely and accurate manner. Addressing these gaps has been an important priority for the G20 economies and DGI-2 recommendation 8 places the focus on ISAs.

35. **DGI-2 Recommendation 8 states that all G20 economies compile and disseminate, on a quarterly and annual frequency, institutional sector accounts flows, and balance sheet data.** This is based on the internationally agreed template, including data for the other (non-bank) financial corporations sector, and develop from-whom to-whom matrices for both transactions and stocks to support balance sheet analysis.<sup>22</sup> The G20 recommended presentations are quite detailed, in particular in relation to the financial corporations institutional sector with very extensive subsectors that in some cases account for activity in individual instruments.

36. **Many critical indicators are produced from this ISAs framework, showing the interaction between income, consumption, finance and wealth.** Along with that, saving, capital and financial investment ratios can be produced. The accounts are also key inputs to the measurement of wellbeing through the household institutional sector presentations of primary income flows together with secondary distribution of income and the relationship with household disposable income. Other key indicators such as government debt and deficit and other leverage ratios can also be derived.

37. **To better understand globalization aspects, Recommendation 8 also encourages G20 countries to separately identify foreign-controlled corporations, domestic-controlled MNEs, and other corporations through the sequence of accounts** (See Annex II for institutional sector breakdowns).<sup>23</sup> These accounting presentations, now incorporating a foreign and domestic split by institutional sector are comprehensive and entail the recording of production accounts to detailed income and saving accounts as well as financial accounts transactions and balance sheets– helping policymakers to distinguish between economic activity driven by the domestic firms which are not part of MNEs and those driven by MNEs, which may have different implications for domestic welfare. Furthermore, separately identifying foreign controlled corporations can allow for a more informed understanding of corporate saving, primary income flows, taxes and transfers in addition to the generation of value added for this foreign/domestic split.

38. **While there are significant benefits associated with the ISAs, one must consider whether they are practical for national statistical compilers to implement.** Given the reality that economies have varied degrees of statistical sophistication, the G20 DGI-2 identifies both required and encouraged items. The foreign/domestic split as an encouraged item recognizing that for some economies such a split may not be relevant in their economy, in other words it does not rise to the level of materiality. Furthermore, for some economies, this method of highlighting MNE activities require only additional granularity in the statistical framework to identify foreign-controlled enterprises and domestic entities

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<sup>22</sup> Recommendation 8, DGI 2 <https://www.imf.org/external/np/seminars/eng/2015/dgi/pdf/8.pdf>

<sup>23</sup> The G20 recommendation builds on the 2008 SNA recommendations of separately identifying foreign-controlled corporations. It adds additional granularity, such as separately identifying domestic MNEs, as well as identifying an aggregate domestically controlled corporations subsector.



that are a part of the MNEs. For other economies, this level of granularity can introduce an additional resource constraint on the statistical system.

## SPECIAL PURPOSE ENTITIES

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39. **Including and separately identifying SPE activities in statistics is necessary for a proper recording of international capital flows and positions.** At the same time, compiling separately identified SPE-related cross-border transactions and positions is an important step towards improving the analytical value of statistics, given that these entities' activities usually have no or limited impact on the domestic (host) economy.

40. **Steps have been taken to identify SPEs in the statistical methodology of the recent manuals and guidelines.** The *2008 SNA*, *BPM6*, the *IMF's Monetary and Financial Statistics Manual and Compilation Guide* (MFSMCG), and the *OECD's 4th edition of the Benchmark Definition of Foreign Direct Investment* (BD4), with a view to reflect on the effects of globalization and the increasing role of MNEs, have all paid attention to SPEs.

41. **While recognizing the concept of SPEs, neither the 2008 SNA nor BPM6<sup>24</sup> provided a definition or formally made them an identified component of the accounts, or as an institutional sector or subsector.** Nonetheless, further guidance has been provided to assist national statistical compilers with recognizing SPE-related activity.<sup>25</sup> However, in terms of data collection on SPEs, not much progress has been made. While Eurostat and the OECD currently collect SPE-related cross-border data only for direct investment<sup>26</sup>, the IMF, on its part, disseminates external sector statistics without a separate distinction of SPEs. If the economies report cross-border transactions or positions on resident SPEs, their activities are embedded within the respective components of the balance of payments, international investment position (IIP), CDIS or CPIS.

42. **With a view to developing an appropriate strategy for addressing existing data gaps regarding the coverage and identification of SPEs in external sector statistics, the IMF BOPCOM set up the Task Force on SPEs in 2016 (TFSPE).** At its October 2018 meeting, BOPCOM endorsed an international definition of SPEs<sup>27</sup> in the context of cross-border statistics,<sup>28</sup> as proposed by its TFSPE. An internationally agreed definition paves the way to separately collecting and identifying SPE-related cross-border statistics.

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<sup>24</sup> The lack of an internationally agreed standard definition of SPEs is clearly acknowledged in paragraphs 4.55 of the *2008 SNA* and 4.50 of the *BPM6*.

<sup>25</sup> In 2013 the European Central Bank (ECB)/Eurostat/OECD Task Force on Head Offices, Holding Companies, and SPEs produced a typology of SPEs to assist compilers in identifying SPEs and in determining the appropriate institutional sector and activity classification. The UNECE publications on 'The Impact of Globalization on National Accounts' and 'Guide to Measuring Global Production' as well the IMF Committee on Balance of Payments Statistics (BOPCOM) papers have maintained the discussion on SPEs.

<sup>26</sup> See <https://ec.europa.eu/eurostat/web/structural-business-statistics/global-value-chains/fdi>. The templates and reporting schedules are available at <http://www.oecd.org/daf/inv/Reporting-BMD4-FDI-statistics.htm>.

<sup>27</sup> [www.imf.org/external/pubs/ft/bop/2018/pdf/18-03.pdf](http://www.imf.org/external/pubs/ft/bop/2018/pdf/18-03.pdf)

<sup>28</sup> The update of *BPM6* is expected to incorporate these developments.



43. **The definition of an SPE, in the context of external sector statistics (ESS), is as follows:**

*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.*

*SPEs are directly or indirectly controlled by nonresidents.*

*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).*

*SPEs transact almost entirely with nonresidents and a large part of their financial balance sheet typically consists of cross-border claims and liabilities.*

44. **In formulating the definition of SPEs, BOPCOM considered several key aspects.** The focus has been to: (i) identify SPEs as institutional units; (ii) encompass not only financial but also non-financial entities; and (iii) spot the criteria to be used, e.g. employment, physical presence, production, residence of the direct or indirect controlling entity, balance sheet structure (i.e. only financial or also non-financial assets, only cross-border positions or also domestic).

45. **To guide national compilers in identifying SPEs resident in their economies, the definition is accompanied by (i) a decision tree, presented in the form of a flow chart (Annex III), and (ii) a typology.** The typology delineates the different types of SPEs and determines their appropriate institutional sector (see Annex IV). The typology<sup>29</sup>, on its part, should be used as a complement to the SPE definition and is not meant to be either exhaustive or prescriptive. Such a typology may assist compilers in identifying SPEs, but also may assist compilers in their institutional sector and activity classification (and their corresponding transactions classification) as well as in determining input data requirements for compilation purposes. Due to their dynamism, the typology could be updated more frequently. To further elaborate on the typology, detailed illustrative summary cards for the main types of SPEs, highlighting the main characteristics of each type, have been prepared.

46. **The merit of developing the definition for cross-border statistics was primarily to assist compilers to properly identify SPEs as opposed to the current statistical manuals' general guidance, where compilers are challenged with flexibility of interpretation.** In fact, the lack of a precise economic definition for SPEs, in practice, has led compilers to typically define these entities according to national legislation and other national considerations. The coverage could differ from economy to economy such that the statistical treatment of SPEs in macroeconomic statistics diverged across economies and could generate bilateral asymmetries between debtor and creditor economies. Also, the treatment and inclusion of SPEs within the national business register varies in concept dependent on the

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<sup>29</sup> A first attempt in defining such a typology was made in the context of the Task Force on Head-offices, Holding Corporations, and SPEs, instituted by the OECD, Eurostat, and the ECB in 2012.

authorities' willingness to invest in data collection and compilation due to the difficulties in identifying them, the absence of a national definition, or the perception that these entities have minimal connection with the domestic economy.

47. **The IMF has equally launched its international data collection to separately identify cross-border transactions and positions for SPEs based on a separate reporting template.** The IMF's data collection on SPEs goes beyond direct investment. Since SPEs have evolved to include nonfinancial specialized entities established by MNEs, the proposed reporting template will single out selected balance of payments and IIP components of resident SPEs, including information on components beyond direct investment activities. As transactions in goods would be relevant for merchanting<sup>30</sup> SPEs, a separate line for net merchanting by SPEs is included. Regarding services, four distinct components of services have been included in the reporting list where SPEs can be of relevance: transport, financial services, charges for the use of intellectual property, and other business services. In addition to the more detailed service components the template also encourages direct investment data to be further disaggregated to distinguish income by the residency of the ultimate controlling parent. Such additional information can assist in compiling the supplemental statistics on who ultimately receives the income, although this template does not collect any geographical breakdown.

48. **The data collection targets the release of 2020 annual data by end of 2021.** To assist with compilation, the IMF is working closely with other international agencies, including the ECB to advance data accessibility. The IMF will also release operational guidelines for implementing national data collection frameworks during 2020. At this stage, the IMF is currently giving priority to initiating international data collection only for resident SPEs, although it recognizes the benefits and the rationale of collecting separate data on non-resident SPEs. Once data collection is more widespread the possibility of international data collection on non-resident SPEs may be revisited.

49. **Identifying nonresident SPEs (SPEs in foreign countries owned by domestic parents) in cross-border statistics is important in some economies.** In countries such as Brazil, Russia, the United Kingdom, and the United States concern for non-resident SPEs is prominent. The U.S., for instance, collects data from many U.S. MNEs, which have direct investment relationships with SPEs abroad. Such SPEs cover holding companies (including intellectual property holding companies), offshore entities associated with investment funds or insurance companies, and the foreign owners of domestic firms that have moved their legal domicile abroad (corporate inversions). Noonan (2019) uses the definition of SPEs and data from the U.S. Bureau of Economic Analysis (BEA) to understand the prevalence of SPEs and their use of pass-through equity in U.S. FDI statistics. His study reveals that in 2016, around 20% of the 78,413 majority-owned foreign affiliates (MOFAs) of U.S. MNEs met the SPE criteria and accounted for 39.7

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<sup>30</sup> 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.

percent (10 trillion USD) of total affiliates (SPE and non-SPE) assets (25.3 trillion USD), of which the majority of those MOFAs (85%) were classified under the holding company category.

50. **While recognizing that separate identification of SPEs would facilitate a clearer view of pass-through funds, it must be acknowledged that not all pass-through capital can be captured through identifying and separating SPEs.** In several countries, the phenomenon of pass-through capital also occurs outside SPEs, either captured through near-SPEs or in other entities. The possibility of separately identifying pass-through activities not related to domestic activities, regardless of the statistical status of the entities (SPE, near SPE, or non-SPE), also emerged. One approach for such identification would lie in a further disaggregation of institutional sectors into foreign-controlled and non-foreign controlled entities<sup>31</sup> (domestic MNEs and other domestic enterprises). This aligns with the G20 DGI-2 recommendation 8 discussed above.

## BUSINESS REGISTERS AND DATA EXCHANGE

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51. **Data sharing agreements and a global enterprise group register will become a priority to fully understand MNE activities and the international trade and foreign direct investment relationships between enterprises.** Data sharing and a global enterprise group register are needed to improve the quality of the statistics. Currently each country takes their own (partial) picture of the MNE as it operates in their jurisdiction. This is often incomplete causing undercoverage or extend beyond the national territory potentially causing duplicate recording of economic activity. Data sharing is needed to compile better estimates and to correctly understand the influence of MNEs on the national accounts and balance of payments statistics. However, data exchange may be subject to confidentiality issues, and sharing data across countries may be hindered by technical, administrative, or legal obstacles.<sup>32</sup>

52. **In this context, there are a number of ongoing data exchange efforts at the international and regional levels such as the establishment of common business registers for MNEs.** In Europe, much groundwork has been laid in this area. The EuroGroups Register (EGR) is a unique example of this international register of MNEs. The EGR contains information on more than 139,000 MNEs active in Europe<sup>33</sup> and provides to national compilers harmonized identification, demographic, and economic data on the MNE groups, enterprises, and their legal units; their investment, control, and ownership relationships. The EGR is the main source for NSOs when compiling statistics related to MNEs. It provides consistent and updated information on MNEs to national statistical compilers in the EU to facilitate the production of consistent, high quality statistics.

53. **Another undertaking to bridge the data gap the joint ECB-Eurostat FDI network project which was launched in 2009 to reduce asymmetries of in FDI statistics of the EU and the balance of payments of the euro area.**<sup>34</sup> The FDI network tool allows compilers of FDI statistics to securely exchange micro data on transactions at the enterprise level and positions. Data sharing between countries helps to

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<sup>31</sup> This option is currently being explored in the updates of both *2008 SNA* and *BPM6*. This would allow for certain financial flows within foreign controlled entities to be interpreted as pass-through activities.

<sup>32</sup> UNECE The Guide to Measuring Global Production, 2015

<sup>33</sup> EGR 2018 Metadata Report: [https://ec.europa.eu/eurostat/documents/54610/4463793/EGR\\_Metadata\\_Report.pdf](https://ec.europa.eu/eurostat/documents/54610/4463793/EGR_Metadata_Report.pdf)

<sup>34</sup> See BOPCOM paper 14/20 and BOPCOM paper 18/26

reduce and identify the reasons for statistical asymmetries. The transmission of confidential data in this project is solely for statistical purposes and to improve the quality of EU and euro area balance of payments statistics. This data sharing experience has led to improvements in the harmonization of statistical methods across EU member countries.

54. **Another initiative to complement work on MNE data is the Analytical Database of Individual MNEs and their Affiliates (ADIMA), a recent ongoing initiative of the OECD.** This database, which uses several open “big data” sources, compiles publicly available statistics on the scale and scope of the international activities of MNEs. ADIMA maintains a register of affiliates and their immediate and ultimate parents, including information on their geographical location and industry activities, following as closely as possible the international concepts related to classifications and ownerships thresholds.

55. **The G20 DGI-2 also contains a recommendation reflecting the evolving need for the exchange of granular data as well as metadata.** Recommendation 20 triggered the development of the International Network for Exchanging Experience on Statistical Handling of Granular Data (INDEXA). This initiative launched in 2017 by a group of central banks to provide a framework for investigating harmonization procedures and metadata structures. Further, the United Nations Economic Commission for Europe (UNECE) Guide to Sharing Economic Data provides other concrete examples of sharing economic data for statistical purposes providing guidance, tools and principles to overcome any barriers to data sharing. In particular, it provides methods for communicating with MNEs.

56. **The emergence of the Legal Entity Identifier (LEI)<sup>35</sup> also provides new insights on individual MNEs and can be used to monitor international asymmetries.** Since the LEI has been introduced in 2012, over 1.5 million entities in over 200 countries have registered for LEI. The LEI has seen widespread adoption in several financial markets. Enhancements of data collected within the LEI framework, including information on the direct and ultimate parents of the legal entities, may support further progress when linked to business registers.

## GLOBAL VALUE CHAINS AND MULTINATIONAL ENTERPRISES

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57. **The UN (2019) publication of *Accounting for Global Value Chains: GVC Satellite Accounts and Integrated Business Statistics* provides a framework for the measurement of GVCs.** This consists of a multi-country supply and use table and related institutional sector accounts and a framework for integrated business, trade and investment statistics. It outlines how economic statistics can be made more accurate and relevant in measuring the effects of globalization in national accounts, business and trade statistics. The publication builds on existing standards, guidelines and research, in particular the work undertaken by the UNECE, the OECD and the Statistical Office of the European Union (Eurostat). Such an

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<sup>35</sup> The Global LEI System is a joint public/private sector initiative endorsed by the G-20 and the Financial Stability Board (FSB) for the unique identification of parties to financial transactions. The LEI was introduced to address the problem underscored by the global financial crisis of having large number of legal entities, scattered across the world, with no uniform international method of identification.

integrated framework that spans across various statistical domains is useful in constructing Trade in Value Added (TiVA) indicators because it may facilitate the production of the required data.

58. **TiVA indicators use Inter-Country Input-Output (ICIO) tables to address the double counting implicit in gross flows of trade.** TiVA data<sup>36</sup> show how (in which industries) and where (in which territories) value is generated in the production of a good or service. The recent objective has been to mainstream the production of TiVA indicators, and the underlying ICIO tables, from which they are derived, into the global statistical information system. The ICIO tables reinforce the significance of the national Supply and Use Tables (SUTs) and IO tables in which they rely.

59. **Both the 2008 SNA and BPM6 provide useful frameworks for additional information that would be helpful to improve the quality of ICIO tables.** Two such recent initiatives that utilize the underlying international standard frameworks to improve GVC analysis are the OECD extended SUTs and the BOPCOM Working Group on Balance of Payments Statistics relevant for GVCs (WG-GVC).

60. **The construction of ICIO tables, implicitly assume that all firms within a given industrial sector have the same production function (input-output technical coefficients), import intensity and export intensity.** But evidence suggests that these assumptions do not hold. For instance, larger firms typically export and import more and have higher labor productivity than smaller firms. The same generalizations hold true for foreign owned enterprises, or enterprises with affiliates abroad, compared to purely domestic firms. But TiVA estimates, relying on national SUTs and IO tables, cannot reflect these heterogeneities; meaning that key measures, such as the import content of exports are downward biased.

61. **The aim of extended SUTs is to better account for firm heterogeneity within industries of the supply-use framework.** Ahmad (2018) points out that one of the most useful dimensions for constructing extended SUTs concerns breakdowns by ownership structures— e.g. Foreign Owned Affiliates, Domestic MNEs with affiliates abroad, and Domestic Firms with no foreign affiliates. This decomposition allows for a better understanding of the effects of MNEs on industry and product flows. The Ahmad (2018) proposed breakdown is consistent with the proposed breakdown of ISAs within the G20 DGI-2. Having consistent proposals for the breakdown of units within the institutional sector accounts and the extended SUTs would facilitate analysis by providing the granularity needed. Fetzer et al. (2018) and other studies have demonstrated the feasibility of extended SUTs. However, the benefits of the supplemental information can only be unlocked with considerable resources dedicated to data collection and linking.

62. **For balance of payments statistics, the WG-GVC identified the availability of detailed information (such as geographical or product) required at the data source level as items that could be provided to improve the quality of ICIO tables.** While compilation cost, confidentiality, and reporters' burden are strong impediments to produce relevant GVC data, BOPCOM supported the final

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<sup>36</sup> The international statistics community has been developing these new measures, for example the OECD-WTO Trade in Value Added (TiVA) database (as illustrated above), World Input-Output (WIOD), Asia-Pacific Economic Cooperation (APEC) TiVA and the European Full International and Global Accounts for Research in Input-Output Analysis (FIGARO) initiative.

recommendations of the WG-GVC and that a GVC data collection template should be developed. Acknowledging compilation challenges and considering difficulties for the implementation in countries with low statistical capacity, the IMF and OECD will develop a template and propose two reporting levels: (i) core or minimum set of items and (ii) encouraged data that more statistically developed economies are able to report.

63. **Furthermore, the WG-GVC also stressed that identifying MNEs in the current account can address the treatment of income.** Value-added consists of the return to capital (i.e., operating surplus) and labor (i.e., compensation of employees). While the return to labor is expected to largely remain in the host economy, the profits (i.e., return to capital) of the direct invest enterprise ultimately accrue to the foreign parent. In addition, domestic MNEs will benefit from the profits they receive from their foreign affiliates. Thus, a further breakdown of the current account to better highlight MNE activity could be considered in the next update to the international standards

64. **A deeper and wider review of MNE activity should also be sought in the next update to the international standards.** Investigation on whether other components useful for highlighting MNE activities—such as retained earnings of MNE portfolio investors, intragroup transfers of IPPs and intragroup trade—has prompted calls for exploring the possibility of introducing a sub-sectorization distinguishing between domestic MNEs that have affiliates abroad, foreign controlled enterprises and other domestic enterprises, which re-joins the idea of adding sub-sectors in the current framework discussed by the TFSPE and the G20 DGI-2 recommendation 8.

## How can national statistical compilers meet user needs related to Globalization?

65. **As part of the SNA Research Agenda, leading to the update of the 2008 SNA scheduled to take place in 2025, the Intersecretariat Working Group on National Accounts (ISWGNA) has set up the Globalization Task Team (GZTT).** This task team is responsible for developing guidance notes on the treatment of MNEs and SPEs, in consultation with related task teams created under the aegis of BOPCOM. A number of options are being considered by the GZTT to better understand the contribution of MNEs and SPEs to economic and financial flows in the SNA framework. The options can be grouped into four categories:

- 1) **Existing macroeconomic indicators-** emphasize and utilize indicators in the current framework.
- 2) **Granular or supplemental data-** incorporate more granular (meaning more disaggregated data consistent with the fundamentals of the “core” framework) or supplemental (require a rearrangement of classifications to present alternative views but still consistent with the core framework).
- 3) **Alternative presentations or extensions-** Data compiled outside the 2008 SNA and BPM6 conceptual framework and may be based on alternative concepts to facilitate deeper analysis.

4) **Change standards**- change the conceptual treatment which requires a change to the core SNA and *BPM6* framework.

66. **The first two options imply that the existing standards are generally still fit for purpose.**

While the third option implies that in general the core accounting standards are fit for purpose, but alternative views are needed to better understand certain phenomena. The fourth option implies that the conceptual framework needs to be revisited to meet user needs. Each of these approaches have very different implications for the accounting standards advocated in the 2008 SNA and BPM6 and the work that has been initiated in the update of these manuals.

67. **The first option is straightforward because it leverages existing measures in the current framework.** A communication strategy could be developed to better explain the various uses of each measure. Directing attention to key indicators beyond GDP, such as GNI, gross national disposable income, net domestic product, net national income, and net national disposable income, which are not equally affected by MNEs. The change in practice for some countries in this case would be to ensure that these indicators are compiled. Furthermore, if more emphasis is put on certain indicators it may increase the demand for such indicators and encourage less statistically advanced statistical systems to fund and produce such indicators. It could also entail a revised communication strategy for the national accounts, away from single or dual headline measures such as GDP or GNI toward multiple measures that give a more balanced picture of economic performance. However, this strategy does not resolve the fact that some key indicators may experience distortions that may need to be more adequately addressed.

68. **The second option is to expand the level of details provided in the recommended presentations of the national accounts or balance of payments to highlight the scale and impact of globalization.** It meets user demands by providing more data. The current deliberations of the GZTT point to a preference for this option over option three. The GZTT so far has concluded that developing alternative indicators that slightly modifies the core concepts should not be considered in the next update of the 2008 SNA. While noting that alternative indicators may be useful, particularly in a national context, the policy value of such indicators to be implemented in all economies was questioned. For such alternative measures to be adopted there is a need for a critical mass of countries to agree and start producing them since one of the main purposes of the international standards is cross country comparability. Therefore, the GZTT concluded that such alternative indicators should be left up to individual countries but also cautioned that it could be a source of confusion when comparing data across countries.

69. **The next section describes some current approaches taken by national statistical compilers as a means of developing a better understanding of globalization.** It also shows how various users' needs can be met. The section utilizes Australia and Ireland data as examples, illustrating the feasibility of being able to implement the emerging recommendations of the GZTT.

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## EXISTING INDICATORS

## CASE STUDY OF AUSTRALIA

70. **The current international statistical frameworks offer a breadth of key macroeconomic indicators that are designed to capture flows for a single economy—including flows between the institutional units located in the economic territory and in the rest of world.** Some indicators are more vulnerable than others to intra-MNE flows. This integrated system offers a wealth of information that are better suited to answer certain economic questions. Each measure is useful to assess different aspects of progress in the economy. Which measure to use depends somewhat on the focus of the analysis. The following are indicators beyond GDP that are emphasized in Australia.

- **Net domestic product (NDP):** GDP adjusted for the consumption of fixed capital (depreciation). GDP is a measure of economic activity within a single period and does not account for previously created fixed assets (machinery and equipment, buildings, and intellectual property products) that are used up in the production process. NDP can be interpreted as a measure that takes into account the sustainability of economic growth with respect to fixed assets.
- **Real gross domestic income (RGDI):** GDP adjusted for changes in the terms of trade, that is the relationship between the prices of exports and imports. In periods of strong increases (decreases) in the terms of trade, focusing solely on GDP would not take into account the effect of increased (decreased) income available to a country's residents.
- **Real gross national income (RGNI):** GDP adjusted for changes in terms of trade and real net primary income receivable from non-residents. If the income from GDP is supplemented (or subtracted from) by net inflows of income from overseas, for example through interest and dividend flows, then growth rates in GDP will underestimate the growth in the income available to a country's residents.
- **Real net national disposable income (RNNDI):** GDP adjusted for changes in terms of trade, real net primary and secondary income<sup>37</sup> receivable from nonresidents and consumption of fixed capital. Real net national disposable income provides the widest view of these four measures of the income available to a country's residents to acquire goods and services for consumption and investment.

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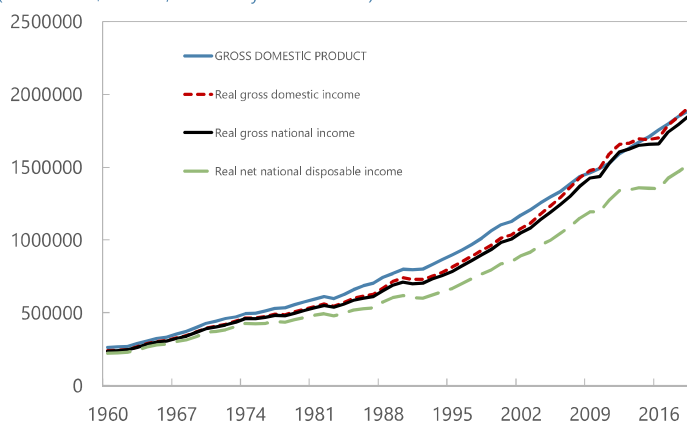
<sup>37</sup> Cross-border secondary income flows consist of current transfers between residents and nonresidents such as personal transfers (e.g. workers' remittances), current taxes on income, wealth, etc., social contributions and benefits, net nonlife insurance premiums and claims, current international cooperation, and miscellaneous current transfers.



**Figure 7: Key National Accounts Aggregates**

### Key National Accounts Aggregates

(Australian \$ million, financial year end June)



Source: Australia Bureau of Statistics Table 1. Key National Account Aggregates (cat. no. 5204.0)

71. **Because real GDP fails to account for the trading gains and losses that result from changes in the terms of trade, those economies with significant trade in volatile commodities, such as Australia, may also emphasize real income measures.**

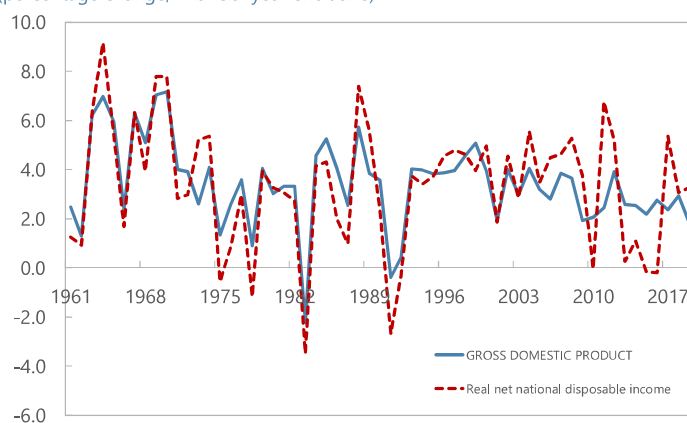
Figure 7 compares the annual value of each measure for Australia. The different levels of the series reflect the different scope of each measure. The convergence between RGDI, RGN and real GDP can be attributed to improvements in Australia's terms of trade.

72. **Of greater interest in this kind of analysis are the growth rates in each series.** In figure 8 growth in real GDP and RNNDI is presented. The two measures follow the same overall pattern, although at times the annual growth rates in the two series are slightly different. For example, the recent higher growth in RNNDI can be attributed to a strong increase in the terms of trade. That is, increasing export prices and falling import prices have had the effect of increasing the capacity of Australia to purchase goods and services for consumption and investment.

**Figure 8: Real GDP and Real net national disposable income**

### Trend in GDP and RNNDI

(percentage change, financial year end June)



Source: Australia Bureau of Statistics - Table 1. Key National Account Aggregates (cat. no. 5204.0)

73. **Real income measures can be used as indicators of economic welfare.** The update of the 2008 SNA could provide more emphasis on real income measures, such as net national disposable income which takes into account remittances from abroad which can be important in some economies. While the SNA provides a brief general discussion of real income reflecting the real purchasing power it is not prescriptive of what types of income measures would be needed to appropriately measure economic welfare.

As Reinsdorf (2020) discusses the appropriate measure of real income would use a deflator containing prices for the uses of that income rather than from the sources of the income.<sup>38</sup>

## BETTER HIGHLIGHTING ACTIVITY OF MNES

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### INSTITUTIONAL SECTOR ACCOUNTS: THE CASE STUDY OF IRELAND

74. **In response to the restructuring of MNEs in 2015 (discussed above) and in line with the ESG, which follows the G20 DGI-2 recommendation 8, the Irish CSO decided to separately identify foreign-controlled MNEs.** This was achieved by including more detailed presentations of data in the accounting framework of the ISAs for Ireland. Specifically, detail was added on the direct contribution of foreign-controlled MNEs to gross value added (GVA) or GDP, including through the entire sequence of accounts for the economy.

75. **Implementing this proposal was a multi-stage initiative by the Irish CSO.** In the existing suite of national accounts publications, there was already an annual analysis of the contribution of both MNEs and non-MNEs to the economic aggregates of Ireland.<sup>39</sup> This was in the framework of a breakdown of economic activity classified into industrial sectors using the Statistical Classification of Economic Activities in the European Community (NACE)<sup>40</sup> presentation as opposed to the ISAs presentation being discussed below.

76. **This staged approach followed the hierarchy of different classifications of the MNE sector for the Irish economy.**<sup>41</sup> The proposed split of domestic and foreign activity was ranked in terms of relative ease of implementation. So rather than awaiting the results of a comprehensive micro-analysis the first step followed was to produce a split between the large MNEs covered by the Irish CSO's large cases unit (LCU)<sup>42</sup> and the rest of the economy. These ISAs therefore provided accounts for 2013 – 2016 for

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<sup>38</sup> Reinsdorf (2020) notes that the operational definition of an economy's real income in the SNA is not entirely consistent with this. It allows use of a special deflator for income that comes from net exports.

<sup>39</sup> <https://www.cso.ie/en/statistics/nationalaccounts/grossvalueaddedforforeign-ownedmultinationalenterprisesandothersectorsannualresults/>

<sup>40</sup> The international agreed industrial classification by economic activity is International Standard Industrial Classification of All Economic Activities (ISIC) Revision 4

<sup>41</sup> The highly globalized nature of the Irish economy has necessitated a number of presentations to highlight the contribution of MNEs to measures of economic activity.

<sup>42</sup> While foreign-controlled institutional units can be identified from business registers, accurately measuring this subsector in macroeconomic statistics can be a challenge. Several countries have established large case units (LCUs) to collect data on MNEs and other complex enterprises in order to analyze the consistency of these data.

non-financial corporations divided into large foreign-controlled MNEs<sup>43</sup> and the rest. These 50 largest foreign MNE Groups (out of approximately 114,000 enterprises in the nonfinancial corporations institutional sector (S.11)) were presented as a proxy for all the MNEs.

77. **This structural presentation explained how these large MNEs earned 44 percent of total GVA of nonfinancial corporations in 2016, but 58 percent of the total gross operating surplus (B.2g).** At the same time only eight percent of the total compensation of employees (D.1) paid by nonfinancial corporations was from large foreign-controlled MNEs, reflecting, amongst other things their use of contract manufacturing abroad. Thus, the other nonfinancial corporations account for the vast majority of employment in this sector. Critical information on profit share, return on equity and investment were also provided for this proxy foreign subsector of the nonfinancial corporations' institutional sector. Table 1 illustrates the data available from this accounting presentation.

# Gross Value Added 2017


## Institutional Sector Accounts Non-Financial and Financial 2017

### Summary Table

ANNUAL ACCOUNTS BY INSTITUTIONAL SECTOR - SUMMARY TABLE

€million

Key Variables	S.2	S.1	S.1N	S.11	S.11a Large Foreign- Owned Non- Financial Corporations	S.11b Other Non- Financial Corporations	S.12 Financial Corporations	S.13 General Households Government incl. NPISH	S.1M Households	S.14 NPISH	S.15 NPISH
(a) B.1 <sup>g</sup> Gross Domestic Product	2013	179,922	14,913	107,465	30,772	76,693	13,465	22,134	21,945	21,350	595
	2014	195,293	15,942	117,901	37,418	80,482	15,788	22,088	23,574	22,916	658
	2015	262,466	16,884	180,200	91,174	89,026	17,608	22,933	24,842	24,113	729
	2016	273,238	18,023	184,862	89,648	95,214	20,165	23,702	26,496	25,757	739
	2017	294,110	18,163	201,871	100,562	101,309	20,546	25,246	26,285	27,605	680

 [www.cso.ie](http://www.cso.ie)

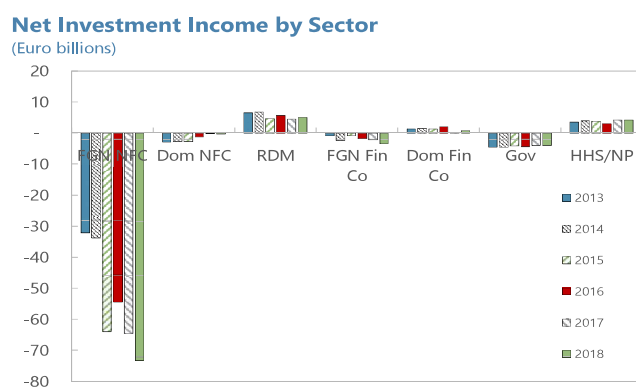
78. **The next stage required the Irish CSO to undertake a comprehensive microanalysis of all entities and then allocating them between domestic and foreign as an initial step.** Having made this foreign/domestic distinction it was also decided to go further by detailed subsectoring to address some of the very same issues that are relevant to this paper. In the ISAs that were already being produced in

<sup>43</sup> In Ireland they utilize foreign-owned and controlled interchangeably because most inward FDI entities are wholly owned, i.e. 100% by their parent, and most outward FDI are similarly 100% owned by the resident entity. Foreign ownership is speaking of FDI relationships only.

Ireland prior to 2016 the financial corporations institutional sector was already disaggregated into three sectors:

- Monetary financial institutions (S.121+S.122+S.123)
- Financial Intermediaries and Funds (S.124+S.125+S.126 +S.127)
- Insurance Corporations and Pension Funds (S.128 +S.129)

**Figure 9. Net Investment Income by Sector**



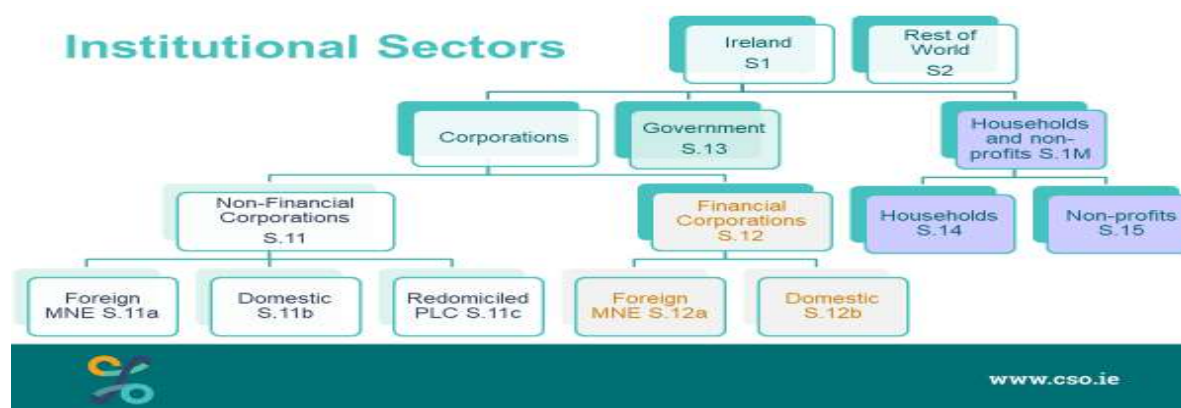
Source: Ireland Central Statistics Office

79. **The approach followed was to extend the foreign and domestic subsector presentation to both the nonfinancial and financial corporations institutional sectors.** In the case of nonfinancial corporations another subsector was introduced for redomiciled corporations (also known as corporate inversions). The rationale for separately presenting data relating to redomiciled corporations was to obtain a more informed view of outward direct investment activities for the economy. For policymakers it was important that a clear

perspective on direct investment activities by Irish MNEs excluding the redomiciled entities was presented. Although the redomiciled entities have in most cases a small domestic presence they conduct substantial cross border transactions recorded in the Financial and Current Accounts of the Balance of Payments along with the Rest of the World sector in the Sector Accounts. The substantial networks of foreign affiliates of redomiciled MNEs is separately presented on a net basis in figure 9.

80. **Inevitably there are some of these redomiciled entities that have related production or services entities in Ireland and are fully engaged in the economy.** Nevertheless, it is a useful distinction. The overall structure is presented in figure 10 below.

**Figure 10. Irish Institutional Sector Structure**



81. **The challenge when an NSI decides to present additional analysis or increased granularity around its outputs is firstly whether it can be done within the constraints of the existing data that is available.** Secondly and more importantly is the question of whether this type of presentation can be repeated and automated. This is a critical distinction between researchers and statistical compilers - the compiler must repeat the production every quarter or every year. In this case for the Irish CSO, it is an annual production of the ISA with a reduced presentation that does not include the more detailed foreign/domestic breakout in the Quarterly Institutional Sector Accounts.

82. **When undertaking this work the Irish CSO had already invested in the development of its IT systems to give the type of flexibility needed to deliver these outputs.** In addition, the data that the Irish CSO obtains in relation to the activities of MNEs in Ireland is detailed micro data. The Irish statistical system is a highly centralized one where practically all micro data is available to the Irish CSO. This includes the critical rest of the world data which is also available as the Irish CSO is also the compiler of the Balance of Payments and other International Accounts in Ireland. Note that this is not the case in many countries. In many countries the central bank compiles the balance of payments statistics and the NSO compiles the national accounts statistics. This clearly reinforces the need for close cooperation and data sharing between institutions within a country.

## **GROSS VALUE ADDED BY INDUSTRY: THE CASE STUDY OF IRELAND**

83. **In the economic statistics for Ireland there are now two presentations of foreign/domestic GVA.** First, even before the ESG and the events of 2015 occurred, as referenced above, there was a clear need to distinguish between foreign-dominated sectors relating mainly to pharmaceuticals, medical devices, electronics and technology, which include software and social media corporations. On account of the high levels of GVA generated in these sectors this was welcomed as a useful additional presentation and allowed a foreign/domestic analysis of GVA in current and constant prices. In this scenario there was a need to retain an alignment between the various presentations across the economic accounts of foreign/domestic because, of necessity, they cannot all be exhaustive in their detailed micro analysis and instead proxy elements of this classification are used.

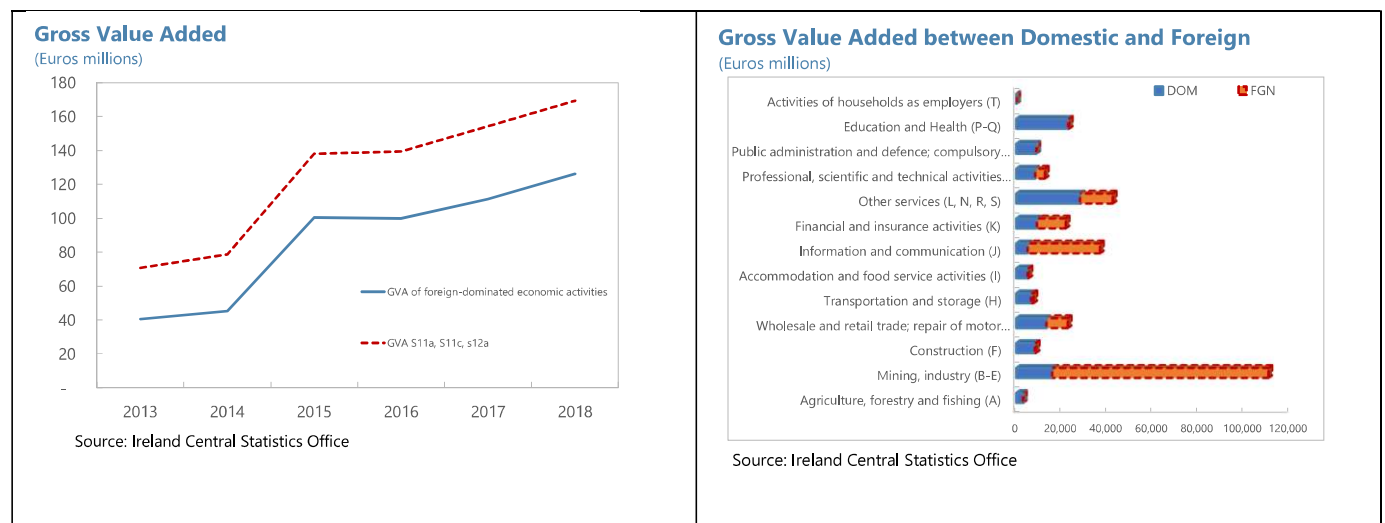
84. **When the extensions to the ISA were being implemented, the additional classifications of the data allowed firstly the presentations discussed in the previous section for the various subsectors in foreign/domestic in a full sequence of accounts.** In addition to this analysis it was also possible to cross classify the data by economic (industrial) sector along with institutional sector. This allowed for new analysis which transformed the content of the ISA for Ireland into a hybrid of Economic Activity (by industry) and Institutional Sector Accounts. These additions have been welcomed by the various stakeholders such as policymakers and analysts and prompted one commentator to say<sup>44</sup> ... *at the end of 2019, as part of the Institutional Sector Accounts, the CSO published a full break-down by industrial sector of output for foreign-owned MNEs and domestic business. At last, this makes possible a detailed analysis of the sectors that are growing rapidly and the relative importance of foreign MNEs*

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<sup>44</sup> See article by John Fitzgerald <https://www.esri.ie/publications/understanding-recent-trends-in-the-irish-economy>

85. **Nevertheless, there was a need to ensure that users could see the link between this ISA based presentation of foreign and domestic economic activity and compare it to the previous GVA analysis.** The chart below illustrates the relationship between the two series and it can be seen that the trend over time is highly correlated – the gap illustrates the difference in coverage between selecting a relatively small number of economic activity sectors that are dominated by foreign-controlled MNEs and a more comprehensive presentation of all foreign and domestic-owned entities. To illustrate the analytical potential of the cross classified data between the GVA of the foreign-dominated economic activities and the GVA of foreign-controlled corporations and redomiciled MNE institutional sectors see figure 11a. Figure 11b illustrates that the economic sectors of mining and industry, information and communication, financial and insurance activities, wholesale and retail trade, and other services have a large share of GVA generated by foreign-controlled corporations.

**Figure 11 a and b. Gross value added**



86. **The full potential of this data set can be appreciated by looking at the Irish CSO StatBank<sup>45</sup> tables on the screen shot below.** The potential for cross classified data by institutional sector and economic activity is clear for a number of key variables.

<sup>45</sup> <https://statbank.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=ISA05&PLanguage=0>



## New Breakdown by NACE and sector

Select at least one item from each list. The tick button selects all, and the dash button deselects all. To select a row of lines, press the left mouse button and slide it over the lines you want. To select or deselect individual lines, use Ctrl-click. You can also type a letter to get to the next line starting with that letter.

Current Account (3)

More options

Compensation of employees (D 1)

Gross value added (B 1g)

Gross operating surplus/Net income (B 2g/5 3g)

CoE/GOS/GVA

Institutional Sector (9)

More options

Domestic financial corporations (S 12a)

Domestic Non-Financial Corporations (S 11b)

Foreign-owned financial corporations (S 12a)

Institutional sector

NACE Rev 2 Economic Sector (20)

More options

Agriculture, forestry and fishing (A)

Mining and quarrying, manufacturing (B,C)

Electricity, gas, steam and air conditioning supply (D)

Economic activity sector

Year

More options

2018

2017

2016

Year

Number of selected data cells for the table: 1  
(select a maximum of 30000 data cells)

Cancel Show table

Statbank table ISA05  
www.cso.ie  
11

87. **The latest edition of the ISA for Ireland indicates a path that could be followed by other compilers to enable a better understanding of globalization in an economy.** Ireland has made use of the existing accounting framework of the 2008 SNA by providing more detail within the ISAs. This is one of the methods being currently explored by the GZTT as a possible future course for discussing how to develop better macroeconomic indicators to better explain the extent of globalization within the national statistics of a country during the next update of the international standards.

### SEPARATE IDENTIFICATION OF SPES

88. **As discussed above, external sector statistics are also moving towards collecting data on resident SPEs that have foreign parents.** Putting forward a holistic approach, the GZTT, as a next step, would further analyze if consideration could be given to take those units identified for external sector statistics and identify same within the ISAs. This approach will link the ISAs with the international accounts breakdown and allow to have a complete picture of the economy. Taking the example of the redomiciled corporations in Ireland, consideration could be given to separately identifying SPEs– in countries where these entities are particularly prevalent– through the whole sequence of accounts. This presentation right through the sequence of accounts from production through to saving and the financial account to net lending and borrowing would be very informative in terms of pass through investment, capital investment activities – particularly IP and other aspects of SPE activities. Such, additional breakouts are also under consideration by the GZTT.

89. **The Direct Investment Task Team (DITT), created under the aegis of BOPCOM, will discuss a supplemental framework for DI statistics by ultimate investing economy (UIE), ultimate host economy (UHE), and pass-through capital and income.** These supplemental statistics will permit a better understanding of the geographic allocation of DI statistics associated particularly with those MNEs offshoring, most prominently through holding companies or SPEs. UIE/UHE-based statistics provide valuable additional information for policymakers, including on the risks associated with the spread of global protectionism. Information on the UIC of SPEs could also be valuable for exploring alternative treatments of the residency of SPEs when discussed within the GZTT.

## Conclusion

90. **Policy relevance, quality and practicability should drive what should be considered when updating the next generation of statistical standards.** To address what data are needed for policy, the issues highlighted in this paper have thus far pointed to providing more granular and supplementary measures, allowing the flexibility needed for countries of varying statistical capacity. Furthermore, the international standards must encompass the needs of a wide range of countries with very different economic structures and statistical systems. This requires a pragmatic approach to developing and implementing methodological standards, not least because the aspiration of one-statistical-standard-fits-all is difficult to implement. Developing recommendations as to what constitutes something as material for an economy and therefore requiring measurement and what is not material and does not require measurement would be useful in the next update to the standards.

91. **The international standards should be a roadmap for what can be practically done.** Trying to meet all various user needs by stretching the core framework may likely not be the best approach. Alternatively, extensions to the core accounts based on different principles (for instance, by providing a consolidated view on MNEs wherever this is feasible and material) would avoid the risk of stretching too much the core accounting framework by trying to serve competing requests and possibly putting at risk fundamental principles. Thus, any proposed solutions should be tested by several critical restrictions. Among the most important are: (i) statistical compilation feasibility; (ii) data source availability and accessibility; (iii) objectivity; (iv) and flexibility to implement second-best solutions, due to differences across countries related to their economic structure and statistical capacity. As such, the conceptual guidance should provide a roadmap for what can be done by central banks and national statistical offices, considering existing as well as new and innovative good statistical compilation practices.

92. **The GZTT is in the process of developing several guidance notes, including the treatment of MNEs and SPEs- the main focus of this paper.** A key component of the guidance note is to not only consider the conceptual treatment but also the practical implementation aspects. As part of the consultation process, countries would be encouraged to develop experimental estimates following the release of the guidance notes. The development of experimental estimates prior to the adoption of the recommended changes into the international standards would serve two purposes. First, it would allow for compilers to test the practical implications of the change and provide important feedback on the process with regard to the operational viability of implementing the change. Second, it would encourage countries



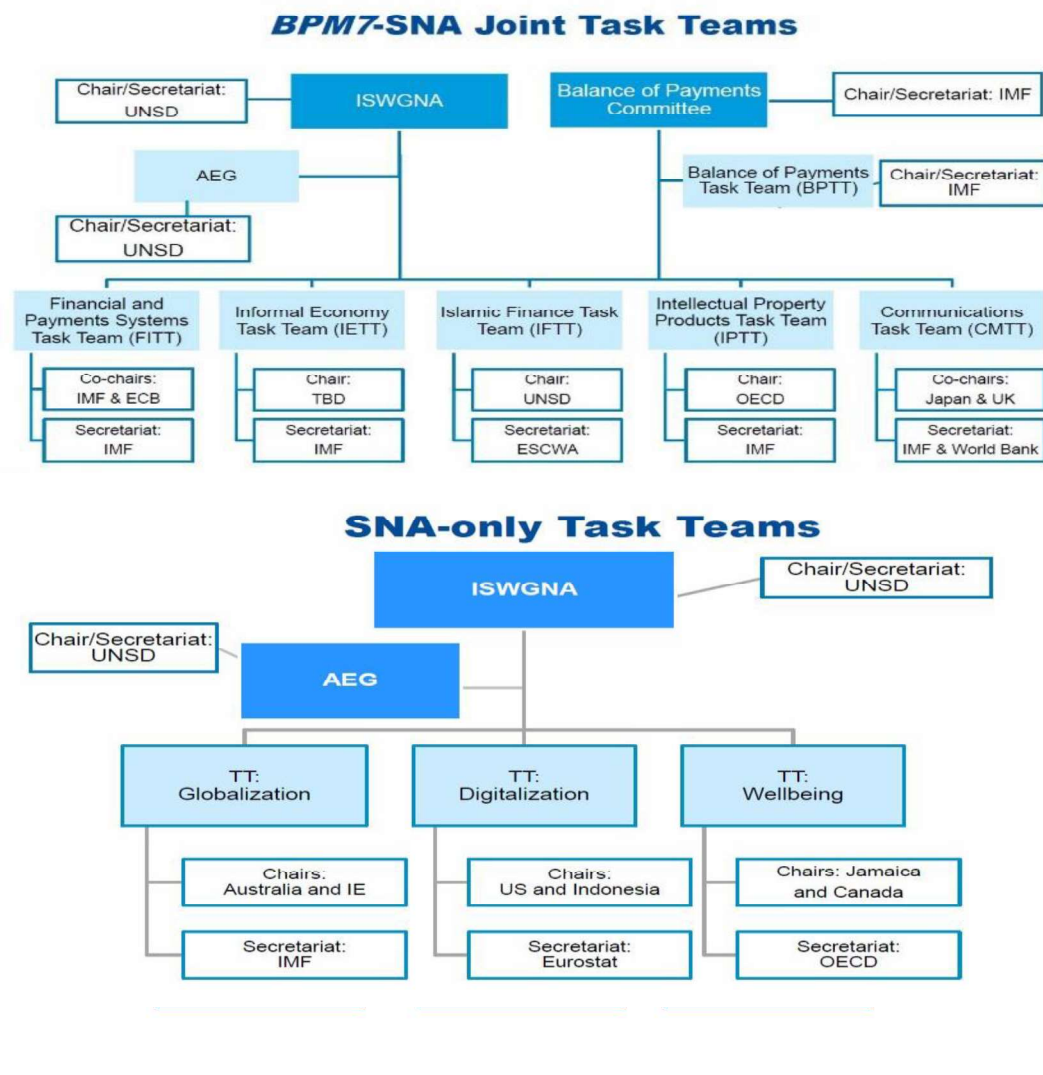
to compile experimental estimates, which would put fit-for-purpose information in the hands of data users as soon as possible.

93. **Additional priority issues to better account for globalization are under discussion.** One of the main issues that impact MNEs that is currently part of the work program of the Intellectual Property Products Task Team (IPTT) is the economic ownership of intellectual property products (e.g., R&D, software) and the related intra-MNE flows. Other issues for the update related to MNEs, include harmonizing DI statistics with FATS/AMNE statistics under the Direct Investment Task Team (DITT), and the discussion on the nationality concept under the Balance of Payments Task Team (BPTT). The recommendations of the GZTT will, to the extent possible, coordinate with the MNE-related work under the other task teams when addressing how to effectively deal with MNEs in the next update of the international standards.

## Annex I: Update of 2008 SNA and BPM6 – the Process

The United Nations Statistical Commission (UNSC) has launched the update of the *System of National Accounts 2008 (2008 SNA)*, with a target release date of March 2025.

In coordination, the IMF Statistics Department has launched the update of the sixth edition of the *Balance of Payments and International Investment Position Manual (BPM6)* targeting to publish an updated version of the Manual (BPM7) by March 2025.



Note: Given that the SNA globalization task team impacts both the *2008 SNA* and *BPM6*, this task team is in the process of formally becoming a joint task team

## Annex II. G20 Data Gaps Initiative-2 (DGI-2) Institutional Sector Accounts

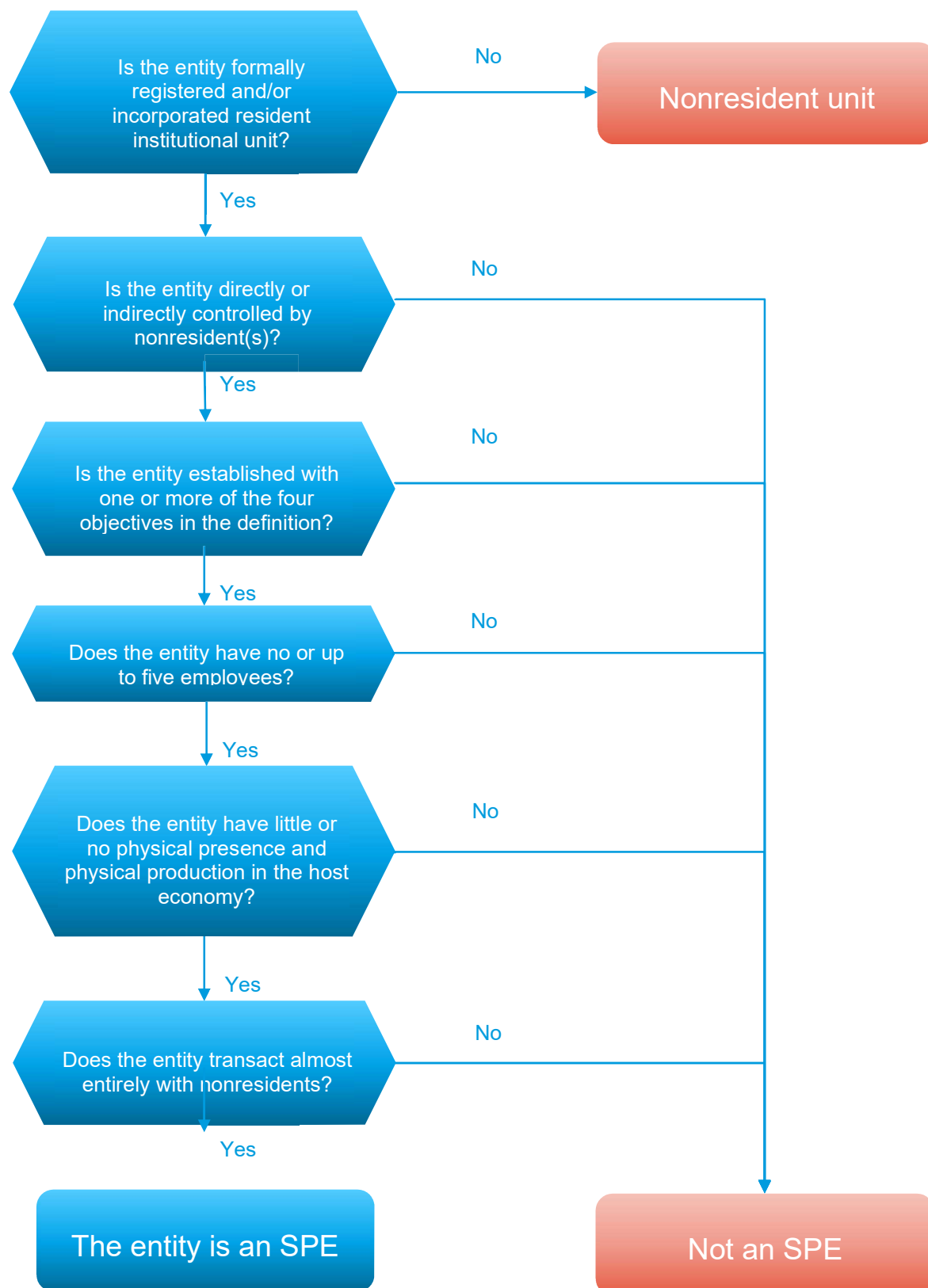
### Institutional sector breakdown

Non-financial corporations						
Total	Domestically controlled non-financial corporations					Foreign-controlled non-financial corporations
	Total	Public non-financial corporations		National private non-financial corporations		
		<i>Of which: Public non-financial corporations, which are part of domestic multinationals</i>		<i>Of which: National private non-financial corporations, which are part of domestic multinationals</i>		
S11	S11DO	S11001	S110011	S11002	S110021	S11003

Domestically controlled financial corporations					Foreign-controlled financial corporations
Total	Public financial corporations	<i>Of which:</i> Public financial corporations, which are part of domestic multinationals	National private financial corporations	<i>Of which:</i> National private financial corporations, which are part of domestic multinationals	
S12DO	S12001	S120011	S12002	S120021	S12003

	= Target
	= Encouraged

### Annex III: Decision Tree to Identify SPEs for External Sector Statistics



## Annex IV: Typology of SPEs for External Sector Statistics

### Typology of SPEs for External Sector Statistics

No	SPE Type	Description <sup>46</sup>	2008 SNA	BPM6	2008 SNA sector
<b>Category I: Corporate Groups' Captive Financial Entities</b>					
<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 4.81	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		Para 4.83	S127

<sup>46</sup> The types listed may be SPEs, but not all entities of the types listed are necessarily SPEs. The definition and the decision tree should assist compilers in determining which entities are SPEs.

No	SPE Type	Description <sup>46</sup>	2008 SNA	BPM6	2008 SNA sector
		in which 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
<b>Category II: Specialized Financial Entities</b>  <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.	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
<b>Category III: Corporate Groups' Nonfinancial Entities</b>  <i>(Those SPEs created by a financial or nonfinancial nonresident entity to fulfil specific nonfinancial activities)</i>					

No	SPE Type	Description <sup>46</sup>	2008 SNA	BPM6	2008 SNA sector
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
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**

***(Those SPEs created by household entities or groups of individuals to hold or manage wealth or real estates for their owners)***

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 and S127
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#### **Category V: Government Owned Financial Entities**

***(Those SPEs created by governments for fiscal activities)***

No	SPE Type	Description <sup>46</sup>	2008 SNA	BPM6	2008 SNA sector
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
<b>Category VI: Other structures</b>  <b><i>(Those SPEs created to conduct any type of transactions other than those covered in the other categories)</i></b>					
6.1	Shell companies	Passing-through funds between nonresidents with no operations in the economic territory of incorporation.  Shell companies don't have employees, are not traded, and can be kept dormant.		Para 4.50	S11 or S12
6.2	Shelf companies	Empty corporation, registered in advance, minimum assets and liabilities.		Para 4.50	S11 or S12

Sources: Joint ESCB/ESS Task Force on Foreign Direct Investment, Frankfurt Meeting, May 2017.

Drawn from *BPM6*, TFSPE Secretariat.

Institutional sectors are based on Annex 1 in the *2008 SNA*.



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