Measuring International Investment by Multinational Enterprises

Implementation of the OECD’s Benchmark Definition of Foreign Direct Investment, 4th edition
The 4th edition of the OECD’s *Benchmark Definition of Foreign Direct Investment* (FDI) provides the most complete and detailed guidance on the coverage, collection, compilation, and dissemination of FDI statistics. Its widespread implementation in 2014 has greatly improved the usefulness of FDI statistics by providing more meaningful measures of investment by multinational enterprises. It has also improved the quality and comparability of FDI statistics across countries.

This publication explains the major changes introduced in the 4th edition of the *Benchmark Definition* and assesses their impacts on the statistics. It also discusses what we have learned about the international investment of MNEs from the new statistics and provides general guidance on using the new statistical series. Finally, it describes research priorities for further improving FDI statistics.

More information on international investment statistics can be found at:  
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Implementation of the OECD’s Benchmark Definition of Foreign Direct Investment, 4th edition

Multinational enterprises (MNEs) are a key channel of globalisation. They serve as the backbone of many global value chains by linking and organizing production across countries and are an important channel for exchanging capital, goods and services, and knowledge across countries. Foreign direct investment (FDI) is necessary for the creation of an MNE. Therefore, reliable and high quality FDI statistics are necessary for policy-making and for tracking globalisation. In 2008, the OECD published the 4th edition of its Benchmark Definition of Foreign Direct Investment (BMD4). The implementation of the BMD4 guidelines greatly improves the quality of foreign direct investment (FDI) statistics by providing more meaningful measures of FDI. Although FDI statistics include some transactions that might not meet the definition of an MNE, such as investments in real estate, investments by MNEs dominate FDI statistics. Thus, the BMD4 statistics will inform the analyses of global value chains and of globalisation more generally. This is why the full implementation of BMD4 is such an important event, not just for the statistics community but also for policy makers.

FDI is defined as the establishment of a lasting interest in and significant degree of influence over the operations of an enterprise in one economy by an investor in another economy. Ownership of 10% or more of the voting power in an enterprise in one economy by an investor in another economy is evidence of such a relationship. FDI statistics cover all cross-border transactions and positions between entities in a foreign direct investment relationship. There are three main components to FDI statistics: 1) financial flows, which capture debt and equity investments between related parties in a specific period; 2) income, which represents the return on equity and debt investment to the direct investor in a specific period; and 3) positions, which are the value of the accumulated direct investment at a specific point in time—it is also referred to as the stock of FDI.

The financing structures of MNEs have gotten more complex over time in response to several factors, including the need to manage global production networks and the desire to minimize tax and regulatory burdens. This complexity can distort FDI statistics in a couple of ways. First, when MNEs channel
investments through several countries, FDI flows are inflated because each flow into and out of each country is counted even if the capital is just passing through. Second, it obscures the ultimate source and destination countries of FDI. The new recommendations improve the statistics on a directional basis by recommending that the statistics be compiled excluding resident Special Purpose Entities (SPEs). SPEs are entities whose role is to facilitate the internal financing of the MNE but that have little or no physical presence in an economy. By excluding such entities from their FDI statistics, countries have a much better measure of the FDI into their country that is having a real impact on their economy. BMD4 also recommends use of the extended directional principle to better capture the direction and degree of influence of the investment and to remove some double-counting in the FDI statistics when debt passes through affiliated entities. Finally, BMD4 recommends that countries compile inward investment positions according to the Ultimate Investing Country (UIC) to identify the country of the investor that ultimately controls the investments in their country.

BMD4 provides recommendations for compiling both aggregate FDI statistics and detailed statistics by partner countries and by industry. The new recommendations result in more meaningful measures of FDI as well as in general improvements to the statistics. At the aggregate level, BMD4 aligns with the recommendations in the IMF’s Balance of Payments and International Investment Position Manual, 6th edition (BPM6) for recording FDI statistics according to the asset/liability principle. This recommendation makes the FDI statistics included in the balance of payments (BOP) and international investment position (IIP) accounts more comparable to other macroeconomic statistics. This presentation of aggregate FDI statistics enables BOP analysis such as examining the impact of FDI on a country’s current account. BMD4 and BPM6 recommend that detailed statistics by partner country and by industry be recorded according to the directional principle, which shows the direction and degree of influence of the foreign direct investment. The directional principle is the most meaningful way of compiling FDI statistics for understanding and analysing foreign direct investment and the actions of MNEs.
FDI statistics are compiled by countries and represent the investments of direct investors resident in their economies to foreign countries and investment by foreign residents in their economy. Therefore, the concept of residency is very important to compiling and understanding FDI statistics. The residence of an entity is the economic territory where it has its center of predominant economic interest; that is, where it has the strongest connection. For an enterprise, this is where it is engaged in a significant amount of production of goods or services. While an entity may have connections to more than one economy, its residency is attributed to only one economy. SPEs are entities without a significant physical presence, and their residence is assigned to the jurisdiction in which they are incorporated. Unincorporated entities are assigned residence where they have the most significant economic presence, either in terms of employment or assets.

This document will provide an explanation of the improvements to the statistics introduced in BMD4 and an assessment of their impact on the statistics. It will also describe the new statistical series to be compiled and provide general guidance on using the new statistical series. It also briefly discusses other statistics on MNEs and future research to further improve FDI statistics.

**FDI statistics according to BMD4**

BMD4 provides new recommendations for defining the universe of entities covered by FDI statistics, for measuring aggregate—that is, total or world-wide—FDI statistics, and for measuring detailed FDI statistics by partner country and by industry.

**What’s included in FDI statistics?**

BMD4 recommends a new method for determining the entities that are included in FDI statistics. This method, called the Framework for Direct Investment Relationships (FDIR), identifies all of the enterprises over which an investor has significant influence under the 10% voting criterion. Figure 1 is an example of the structure of an MNE and will be used to illustrate the different relationships and entities included in a direct investment relationship. It also defines some terms that will be used throughout this report. Each of the boxes represents a different entity, the arrows indicate the direction of ownership, and the accompanying percentages show the share of voting equity owned by the direct investor.
Entity A is a direct investor in two direct investment enterprises: B and C. A is said to have a direct ownership interest in B and C and is called a parent; B and C are called affiliates of A. A controls B because it owns more than 50% of the voting equity in B, but A only has influence on C because it owns 50% or less of the voting equity in C. While a parent is usually a business enterprise, it can be any institutional unit, such as an individual, a government, a non-profit institution, or a trust. In contrast, affiliates must be business entities—either corporations or quasi-corporations. A quasi-corporation is an unincorporated business that operates as if it is separate from its parent, such as a branch.

B and C are also parents. D and E are affiliates of B, and they are also affiliates of A through A’s control of B. Similarly, F is an affiliate of C. However, it is not an affiliate of A as the ownership tie between F and A is considered to be too weak—A only has influence on C, which, in turn, only has influence on F. A is said to have an indirect ownership interest in D and E.

There is no direct investment relationship between B and C because neither one owns any voting power in the other. However, they are called fellow enterprises because they are controlled by the same direct investor. Even though there is no direct investment relationship between the two, any transactions between them are relevant to direct investment and included in FDI statistics because such transactions are likely to result from the influence that A has on both of their operations. There are other examples of fellow enterprises in the figure, including D and C, D and E, and E and C. However, F is not a fellow of any other entity in figure 1 as it does not have a direct investor in common with any of the other entities. The FDIR fully captures these horizontal relationships by identifying all enterprises related to a particular enterprise.
Entity A is the **ultimate controlling parent** (UCP) of affiliates B, D, and E; A is also the UCP of C if no other single entity owns a majority share of C. The UCP is found by moving up the ownership chain from the immediate investor until an entity that is not controlled—that is, owned more than 50%—by any other entity is reached. Entity C is the UCP of F assuming that no other direct investor owns a majority share of C because C is not controlled by A. Economy 1, the country of residence for entity A, is the **ultimate investing country** (UIC) for affiliates B, C, D, and E. Economy 3 is the UIC of affiliate F.

Box 1 provides a description of other changes and clarifications to the transactions and entities covered by FDI statistics in BMD4.

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**Box 1. Other changes and clarifications to the coverage of FDI statistics**

BMD4 made additional recommendations to clarify the transactions and entities included in direct investment. The first of these was to exclude all debt between financial intermediaries, such as banks, from direct investment. Previously, permanent debt, defined as debt that represented a lasting interest, was included in direct investment while all other debt was excluded because this debt was more strongly linked to the role of parents and affiliates as financial intermediaries than to their direct investment relationship. This change recognised the practical difficulties of assessing the permanence of debt.

The next change was to expand coverage to include investments in and by **collective investment institutions** (CIIs). CIIs include such entities as mutual funds, private equity funds, and hedge funds. A CII can be either a direct investment enterprise, if an investor in one economy acquires at least 10% of the voting power in a CII, or it can be a direct investor if it acquires at least 10% of the voting power in a non-resident enterprise. Investments by and into CIIs are included in direct investment if the FDI criteria are met, but this phenomenon bears further watching as the nature of and motivations for direct investments of CIIs may differ from MNEs.

Finally, BMD4 clarifies that non-profit institutions can be direct investors. They cannot, however, be direct investment enterprises because their non-profit status does not allow them to be a source of income, profit, or other financial gain from the units that establish, control, or finance them. Examples of non-profit institutions that could be considered as direct investors include non-profit colleges, universities, or hospitals that acquire voting power in a non-resident business enterprise.

**Impact on statistics.** The exclusion of permanent debt between financial intermediaries will reduce FDI statistics while the inclusion of CIIs and non-profit institutions as direct investors will increase FDI statistics.
Improvements to aggregate FDI statistics

BPM6 and BMD4 recommend that aggregate FDI statistics, which are included in BOP and IIP accounts, be presented according to the asset/liability principle rather than the directional principle as has been the recommendation in previous editions of these international guidelines. On an asset/liability basis, direct investment statistics are organised according to whether the investment relates to an asset or a liability for the reporting country. For example, a country’s assets include equity investments by parent companies resident in that country in their foreign affiliates because those investments are claims that they have on assets in foreign countries. Similarly, a country’s liabilities include foreign parents’ equity investments in affiliates resident in that country because those investments represent claims that foreigners have on assets in the reporting country. The asset/liability presentation does not show the direction of influence as the directional presentation does.

Under the directional presentation, the direct investment flows and positions are organised according to the direction of the investment for the reporting economy—either outward or inward. So, for a particular country, all flows and positions of parents resident in that economy are shown under outward investment, and all flows and positions for affiliates resident in that economy are shown under inward investment. Figure 2 shows the building blocks used to construct the asset/liability and directional presentation of the FDI positions; the presentations of flows would follow the same pattern. The figure shows that the building blocks used are the same—both presentations cover the same flows and positions—but they are organised and combined differently.¹

¹ This discussion focuses on flows and positions between affiliates and parents. The treatment of flows and positions between fellow enterprises is discussed below in the section “Flows and Positions between Fellow Enterprises”.

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Asset/liability principle: records FDI statistics based on whether it represents assets or liabilities to the reporting economy.

Balance of payments (BOP): records transactions between residents of a country and the rest of the world.

International investment position (IIP): records the value of claims (or assets) of residents of an economy on the rest of the world and their liabilities to the rest of the world.

Directional principle: records FDI statistics based on whether it represents investment abroad by parents in the reporting economy (outward investment) or investment by foreign parents in the reporting economy (inward investment).

Fellow enterprises: enterprises that have no direct investment relationship themselves but have a direct investor in common.
Under the asset/liability presentation, the asset side includes assets of both resident parent companies and of resident affiliates, and the liability side includes all liabilities of resident parents and resident affiliates. In contrast, the outward investment position consists only of positions of resident parents, and the inward investment side consists only of positions of resident affiliates. The second difference is in the treatment of reverse investment. Reverse investment is when an affiliate invests in its parent. Under the directional presentation, reverse investment is subtracted to derive the amount of total outward or inward investment of the reporting country.

So, if a resident parent borrows money from one of its foreign affiliates, this is subtracted in calculating the reporting country’s outward investment because it reduces the amount of money that that country’s parents have invested in their foreign affiliates. Similarly, if a resident affiliate lends money to its foreign parent, this is subtracted when calculating inward investment because it reduces the amount of money that the foreign parent has invested in that country. In contrast, all assets and all liabilities are simply added up under the asset/liability presentation. While reverse equity investment is to be treated the same way as reverse debt investment, it is so rare that most of the difference between the two presentations is due to differences in the treatment of reverse debt investment.
The change to recording aggregate FDI statistics on the asset/liability basis was recommended to make FDI statistics consistent with other macroeconomic statistics in general and with the statistics for other functional categories of investment in the BOP and IIP statistics. This change in measurement facilitates macroeconomic analyses, such as examining the composition and size of a country’s liabilities and assets to assess its vulnerability to crises. By providing consistent information on the composition and size of assets and liabilities by functional category of investment (for example, direct investment or portfolio investment) and by instrument (for example, equity or debt), a country’s IIP provides important insights into how vulnerable its economy is to external market conditions. For example, assessing the share of total debt liabilities in direct investment is important because the returns to creditors in direct investment depend on the performance of the debtor. In contrast, the returns to creditors on debt liabilities in portfolio investment do not depend on the performance of the debtor but are required even if the debtor is in difficulty, and, hence, pose a greater risk to the

Figure 3. Comparison of FDI stocks recorded under the asset/liability and directional principles

Source: OECD International Investment Statistics Database

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2 There are five functional categories of investment in the BOP and IIP statistics: direct investment, portfolio investment, reserve assets, financial derivatives, and “other” investment (which consists mostly of deposits and loans).
Directional principle: records FDI statistics based on whether the FDI transactions and positions represent investment abroad by parents in the reporting economy (outward investment) or investment by foreign parents in the reporting economy (inward investment).

Special purpose entity (SPE): an entity with little or no physical presence in the country but that do provide services to the MNE, such as holding assets and liabilities or raising capital.

Fellow enterprises: enterprises that have no direct investment relationship themselves but have a direct investor in common.

economy. That is, the creditor in a direct investment relationship is likely to be more patient because of their relationship with the debtor.

Impact on statistics. Aggregate FDI statistics on an asset/liability basis will generally be higher than those under the directional principle because reverse investment is not subtracted as it is in the statistics on a directional basis (Figure 3). The size of the difference between the two sets of statistics will depend on the amount of reverse investment. Aggregate FDI statistics on the asset/liability basis are available from the OECD and the IMF. The extension of the directional principle to fellow enterprises introduced in BMD4 (and described in the next section) may lead to even more significant differences between the two principles.

Improvements to detailed FDI statistics by partner country and by industry

While the presentation on an asset/liability basis is appropriate for macroeconomic analyses, it is not appropriate for studying the nature and motivations of foreign direct investment. For example, it is not useful for identifying the source countries of direct investment in a particular country or for assessing the access to specific foreign markets by direct investors in that country. The directional principle is most appropriate for these types of analyses and, thus, both BPM6 and BMD4 recommend that statistics by industry and by partner be shown on a directional basis. The statistics classify the direct investment as either outward—a direct investor in the reporting economy has an investment abroad—or inward—a foreign direct investor has an investment in an affiliate located in the reporting economy.

BMD4 makes two major recommendations to improve the statistics on a directional basis that more accurately measure the degree and direction of influence. The first recommendation is to compile the FDI statistics for direct investment passing through special purpose entities (SPEs) resident in the economy separately from the FDI statistics passing through operating affiliates in the economy. The second recommendation is to extend the directional principle to loans between fellow enterprises.
Box 2 provides a description of other changes to the directional basis.

**Box 2. Other changes to the directional basis**

BMD4 makes two clarifications that improve the statistics on a directional basis.

It clarifies that the **debtor/creditor principle** should be used as the basis for the geographical allocation of FDI statistics rather than the transactor principle. Under the debtor/creditor principle, claims and liabilities are recorded according to the country of the party that actually has the financial claim or liability. In contrast, under the transactor principle, the claims or liabilities are allocated to the country of the entity involved in settling the transaction, which could differ from the country of the parents or affiliates undertaking the transaction.

It recommends that FDI statistics be allocated to the industry of the affiliate rather than the industry of the parent. This recommendation provides information on the industries that are attracting FDI.

**Separately compiling FDI statistics for resident SPEs**

MNEs often use SPEs in their ownership structures. SPEs are entities that have little or no employment, physical presence, or operations in a country but do provide services to the MNE, such as holding assets and liabilities or raising capital. While there is no strict definition of an SPE, an enterprise is usually considered to be an SPE if it has the following characteristics:

- The enterprise is a legal entity, formally registered with a national authority and subject to fiscal and other legal obligations in the economy in which it is resident;
- The enterprise is ultimately controlled by a non-resident parent, either directly or indirectly;
- The enterprise has few or no employees, little or no production in the host economy, and little or no physical presence in the host economy;
- Almost all the assets and liabilities of the enterprise represent investments in or from other countries; and
- The core business of the enterprise is group-financing and holding activities while managing and directing play only a minor role.

Examples of SPEs include brass plate companies, financing subsidiaries, conduits, holding companies, shelf companies, and shell companies.
BMD4 recommends that countries compile their FDI statistics excluding resident SPEs, and, then, separately for resident SPEs. This recommendation provides a more meaningful measure of direct investment into and out of an economy by removing FDI that involves funds simply passing through the economy via SPEs on their way to other destinations. Such funds—also called pass-through capital or capital-in-transit—distort the country patterns of FDI statistics and cause double-counting in the statistics. For the country hosting the SPEs, this recommendation improves the measurement of FDI by excluding inward FDI that has little or no real impact on their economies and by excluding outward FDI that did not originate from their economies.

**Impact on statistics.** Figure 4 provides an example of the impact of SPEs on the statistics of the OECD countries that reported their investment stocks separately for resident SPEs at the end of 2014 (or the most recent year available). The figure shows the portion of inward investment stocks attributable to resident SPEs.

The role played by SPEs varies significantly across countries. It is not surprising that the four countries where resident SPEs account for the largest share of investment are the four that have been reporting their FDI statistics excluding resident SPEs for some time. SPEs account for more than 90% of FDI into Luxembourg, and around 80% of FDI into the Netherlands. While lower, SPEs account for more than half of the FDI into Hungary and more than a third of the FDI into Austria.

![Figure 4. Impact of resident SPEs on inward stocks for selected countries, 2014 or most recent year available](source: OECD International Investment Statistics Database)
Of the countries with new reporting excluding resident SPEs, resident SPEs account for more than a third of investment in Iceland, and, so, are very important in explaining FDI in that country. SPEs play smaller, but still significant, roles in investment for Spain, Portugal, Denmark, and Sweden, accounting for 14% to 8% of investment. On the other hand, SPEs resident in Korea, Chile, Norway, and Poland account for 5% or less of investment.

Even in countries where SPEs do not play a significant role in FDI currently, it is useful to be able to identify resident SPEs in the statistics so that their role in FDI can be monitored. By their nature, SPEs can be formed easily and can grow rapidly. In addition, SPEs can have large transactions in a specific period that can distort FDI flows due to their role within the MNE of providing financing or holding assets and liabilities. By compiling FDI statistics that exclude resident SPEs, FDI statistics are not overstated by including funds that are simply being channeled through the SPEs, are easier to interpret for policy-making and other purposes, and provide a better measure of FDI that is likely to have an economic impact in the host economy. Finally, it can be useful to separately identify FDI statistics for resident SPEs even if they do not play a significant role in overall investment because investment into resident SPEs might not follow the patterns of investment into non-SPEs (also called operating affiliates). For example, if there is disinvestment from SPEs, inward FDI will be lower than if they are excluded. In this case, inward investment into operating affiliates would be higher than the statistics indicate.

**Flows and positions between fellow enterprises**

Even though there is no direct investment relationship between fellow enterprises, transactions and positions between fellows are relevant to FDI statistics because such transactions likely resulted from the influence of their common direct investor. BMD4 recommends extending the directional principle to flows and positions between fellow enterprises to better reflect the direction of influence. BMD3 called for recording lending by a resident fellow enterprise to a foreign fellow under outward investment and borrowing by a resident fellow enterprise from a foreign fellow under inward investment. However, this...
treatment did not accurately reflect the direction and degree of influence exerted by resident and non-resident direct investors in the reporting economy. For example, a resident fellow did not achieve any influence over a foreign fellow if it made a loan to that foreign fellow—the influence remained with the direct investor common to both fellows. So, if the direct investor is not resident in the economy, such loans should not be recorded as outward investment. Similarly, a foreign fellow did not achieve any influence over a resident fellow by extending a loan to it—the influence remained with the direct investor common to the fellows.

In practice, some countries did not follow the recommended treatment in BMD3 but instead recorded flows and positions between fellow enterprises according to the residence of the direct investor common to the fellows. So, if the direct investor was resident in the reporting economy, lending and borrowing by resident fellows was treated as outward investment, and, if the direct investor common to both fellows was a non-resident, lending and borrowing by the resident fellow was treated as inward investment. Other countries covered fellow enterprises in their direct investment statistics only partially or not at all.

Under BMD4, the recording of flows and positions between fellow enterprises in a reporting economy depends on the residence of the ultimate controlling parent (UCP) of the fellow enterprise because it is the UCP that ultimately controls the transactions of the fellow. While this treatment applies to both equity and debt investments between fellows, equity investments are rare so it is debt that has the biggest impact on the statistics. Figure 5 summarizes the treatment of loans between fellow enterprises when the directional principle has been extended to

![Figure 5. Recording of loans between fellow enterprises on a directional basis](image)

<table>
<thead>
<tr>
<th>Residence of the Ultimate Controlling Parent (UCP)</th>
<th>Direction of the loan</th>
<th>Effect on investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCP is resident</td>
<td>Fellow enterprise makes a loan</td>
<td>increase in outward investment</td>
</tr>
<tr>
<td>UCP is NOT resident</td>
<td>Fellow enterprise receives a loan</td>
<td>decrease in inward investment</td>
</tr>
</tbody>
</table>
Ultimate controlling parent (UCP): the entity proceeding up the affiliate's ownership chain that is not controlled by another entity (that is, owned more than 50%).

them. If the UCP of the fellow enterprise is resident in the economy, then loans by and to the fellow enterprise are treated as outward investment. Any loan from a fellow enterprise to a fellow enterprise resident in another economy is treated as an increase in outward investment by the reporting economy because it represents an increase in the influence that a resident direct investor (the UCP) has on the direct investment enterprise in another economy. Similarly, if the fellow enterprise receives a loan, it reduces outward direct investment just as it would if the UCP had received a loan because such investment reduces the total amount the resident direct investor—the UCP—has invested abroad.

If the UCP is not resident in the economy, then flows and positions are treated as inward investment. If the fellow enterprise makes a loan to a fellow in another country, that is treated as a reduction in inward investment to the reporting economy as funds that flowed into the reporting economy from the foreign UCP have now flowed to another country, reducing the amount of foreign investment in the reporting economy. It should not be treated as outward investment as making a loan to a fellow enterprise in another country does not give the resident fellow any influence over the operations of the fellow in the other country; instead, it is the UCP that still has the influence. If the fellow resident in the reporting economy receives a loan from a fellow in another country, it increases inward investment as the non-resident UCP’s influence in the reporting economy has increased.

The recording of transactions of fellow enterprises differs between the asset/liability and directional presentations. Under the asset/liability presentation, all equity and debt investments made by resident fellows are recorded as assets, and all equity and debt investments received by resident fellows are recorded as liabilities. The direction of influence does not matter. In contrast, under the directional presentation, the direction of influence does matter. It is determined by the residency of the UCP of the resident fellow enterprise because that is the entity that ultimately controls the transactions of the fellow enterprise. If the UCP is resident in the reporting economy, all transactions and positions of resident fellow enterprises are treated as outward investment, and reverse investment is subtracted in calculating total outward investment. Similarly, if the UCP is non-resident in the reporting economy, all
transactions and positions of resident fellow enterprises are treated as inward investment, and reverse investment is subtracted in calculating total inward investment.

**Impacts on statistics.** Extending the directional principle to flows and positions between fellow enterprises will generally reduce outward and inward FDI statistics for countries that followed the guidance in BMD3. For countries that have significant numbers of fellow enterprises that loan money and are implementing a change in their treatment, the impact can be quite significant. Table 1 provides some examples. The impact ranges from a 10% reduction in the outward stock of Finland at the end of 2008 to a 67% reduction in the inward stock of Belgium at the end of 2009.

It is not possible to assess the impact on the statistics for countries that move from recording flows and positions between fellow enterprises according to the residence of the direct investor to recording them according to the residence of the UCP. However, for countries with little round-tripping, the impact would be expected to be small because the immediate investor and the UCP would both be foreign residents. For countries that begin to cover the transactions between fellow enterprises, the impact would depend on the size and direction of loans between fellows.

**Table 1. Examples of impact of extending the directional principle to the recording of loans between fellow enterprises (€ billions)**

<table>
<thead>
<tr>
<th></th>
<th>Inward Stock</th>
<th>Outward Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Asset/liability</td>
<td>Directional</td>
</tr>
<tr>
<td></td>
<td>(BMD3)</td>
<td>Principle (BMD4)</td>
</tr>
<tr>
<td><strong>Belgium, at end of 2009</strong></td>
<td>410.7</td>
<td>135.5</td>
</tr>
<tr>
<td><strong>Finland, at end of 2008</strong></td>
<td>60.8</td>
<td>51.7</td>
</tr>
<tr>
<td><strong>France, at end of 2011</strong></td>
<td>752.1</td>
<td>463.4</td>
</tr>
</tbody>
</table>

Sources: The Central Bank of Belgium, the Central Bank of Finland, and the Banque de France.
Specific recommendations for valuing FDI statistics

BMD4 and BPM6 both recommend market value as the conceptually appropriate valuation for direct investment stocks and flows, as had previous editions of the guidelines. Market value is recommended because it places all assets at current prices and, thus, promotes consistency in the values of assets of different vintages and consistency in the value of stocks and flows across countries. However, it is difficult to produce market values of FDI positions because the equity of many direct investment enterprises is not listed. Often the only information available to compilers is the book value available on either the books of the direct investor or the direct investment enterprise. Thus, it is necessary to estimate market values for unlisted equity. Unlike previous guidelines, BMD4 makes specific recommendations for calculating market values of FDI stocks that should lead to making market value statistics more widely available and more comparable across countries.

Impact on the statistics. Figure 6 provides an example of the difference between the book value and market value of FDI stocks for Canada. Market values generally exceed book values as the value of investments tends to rise over time, but they are more volatile. As can be seen at the end of 2008, the market value of the positions fell while the book values continued to rise. In addition, while the outward stock measured at book value consistently exceeds the value of the inward stock measured at book value, this is not the case for the stocks measured as market value.

Figure 6. Values of inward and outward stocks under different valuations: Canada

Source: OECD International Investment Statistics Database
FDI statistics collected by the OECD

Financial flows, income, and positions by country and by industry

BMD4 recommends that FDI financial and income flows and positions (or stocks) be presented by partner country and by industry on a directional basis. For each series, the statistics should be presented for all entities and excluding resident SPEs if SPEs are relevant to the reporting economy. The statistics excluding SPEs provide more meaningful measures of investment to and from countries that host SPEs by eliminating capital passing through these entities. Inward investment statistics excluding resident SPEs will capture investment that is more likely to have a meaningful impact on the host economy and to better identify the countries that are investing in operating affiliates in the host economy. Outward investment statistics excluding resident SPEs will more accurately capture investment originating in the reporting economy and its destinations.

The attribution by partner country should be to the immediate partner country. The attribution by industry should be according to the industry of the direct investment enterprise—that is, of the affiliate—and should be based on International Standard Industrial Classification (ISIC) Revision 4. Table 2 provides an example of some of the detailed partner country data disseminated by the OECD. Table 3 provide an example of the detailed statistics by industry disseminated by the OECD.

The OECD disseminates its FDI statistics through an on-line database and through bi-annual, annual and periodic publications. A new database to accommodate the new statistical series available from BMD4 and breaks in series was launched in March 2015. The on-line database includes all of the standard and supplemental series collected by the OECD. In addition, it contains public queries that can be used to generate standard tables. These tables enable comparisons across countries, highlight important aspects of FDI, and help users access the data. The OECD publishes FDI in Figures—it its newsletter summarizing recent developments in FDI—in April and October. FDI statistics are also included in many regular and ad hoc OECD publications.
Table 2. FDI financial flows by partner country for Poland, 2013  
(US millions)

<table>
<thead>
<tr>
<th>Partner country</th>
<th>Inward investment</th>
<th>Outward investment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All resident units</td>
<td>Resident SPEs</td>
</tr>
<tr>
<td>WORLD</td>
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<td>OECD</td>
<td>7969</td>
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<tr>
<td>Australia</td>
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<tr>
<td>Austria</td>
<td>1052</td>
<td>0</td>
</tr>
<tr>
<td>Belgium</td>
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<td>0</td>
</tr>
<tr>
<td>Canada</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>Chile</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>Denmark</td>
<td>-349</td>
<td>0</td>
</tr>
<tr>
<td>Estonia</td>
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<td>0</td>
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<tr>
<td>Finland</td>
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<td>0</td>
</tr>
<tr>
<td>France</td>
<td>240</td>
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</tr>
<tr>
<td>Germany</td>
<td>2537</td>
<td>2</td>
</tr>
<tr>
<td>Greece</td>
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<td>0</td>
</tr>
<tr>
<td>Hungary</td>
<td>31</td>
<td>-3</td>
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<tr>
<td>Iceland</td>
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<td>0</td>
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<tr>
<td>Ireland</td>
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<td>Israel</td>
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<tr>
<td>Italy</td>
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<tr>
<td>Japan</td>
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<tr>
<td>Korea</td>
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<td>Luxembourg</td>
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<td>-2295</td>
</tr>
<tr>
<td>Mexico</td>
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<td>0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>822</td>
<td>88</td>
</tr>
<tr>
<td>New Zealand</td>
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<td>0</td>
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<tr>
<td>Norway</td>
<td>319</td>
<td>0</td>
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<tr>
<td>Poland</td>
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<td>0</td>
</tr>
<tr>
<td>Portugal</td>
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<td>Slovakia</td>
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<td>Slovenia</td>
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<td>Spain</td>
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<td>Switzerland</td>
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</tr>
<tr>
<td>Turkey</td>
<td>127</td>
<td>0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>4441</td>
<td>3469</td>
</tr>
<tr>
<td>United States</td>
<td>270</td>
<td>843</td>
</tr>
</tbody>
</table>

Source: OECD International Investment Statistics Database
### Table 3. FDI financial flows by industry for Korea, 2013

(US millions)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Inward investment</th>
<th></th>
<th></th>
<th>Outward investment</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All resident units</td>
<td>Resident SPEs</td>
<td>Resident Operating Units (Non-SPEs)</td>
<td>All resident units</td>
<td>Resident SPEs</td>
<td>Resident Operating Units (Non-SPEs)</td>
</tr>
<tr>
<td>All industries</td>
<td>6083</td>
<td>30</td>
<td>6054</td>
<td>31488</td>
<td>0</td>
<td>31488</td>
</tr>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>3003</td>
<td>0</td>
<td>3003</td>
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<tr>
<td>Manufacturing</td>
<td>2475</td>
<td>286</td>
<td>2189</td>
<td>12936</td>
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<td>12937</td>
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<tr>
<td>Electricity, gas, steam and air conditioning supply</td>
<td>73</td>
<td>0</td>
<td>73</td>
<td>262</td>
<td>0</td>
<td>262</td>
</tr>
<tr>
<td>Water supply; sewerage, waste management and remediation activities</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>27</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>Construction</td>
<td>-2</td>
<td>0</td>
<td>-2</td>
<td>-334</td>
<td>0</td>
<td>-334</td>
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<tr>
<td>Wholesale and retail trade; repair of motor vehicles and motorcycles</td>
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<td>0</td>
<td>1325</td>
<td>5333</td>
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<td>5333</td>
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<tr>
<td>Transportation and storage</td>
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<td>-1</td>
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<td>-18</td>
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<tr>
<td>Accommodation and food service activities</td>
<td>173</td>
<td>-12</td>
<td>185</td>
<td>246</td>
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<tr>
<td>Information and communication</td>
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<td>-8</td>
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<tr>
<td>Financial and insurance activities</td>
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<td>367</td>
<td>1484</td>
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<tr>
<td>Real estate activities</td>
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<td>-35</td>
<td>-44</td>
<td>2101</td>
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<tr>
<td>Professional, scientific and technical activities</td>
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<td>-567</td>
<td>87</td>
<td>254</td>
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<tr>
<td>Administrative and support service activities</td>
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<td>0</td>
<td>158</td>
<td>1003</td>
<td>0</td>
<td>1003</td>
</tr>
<tr>
<td>Public administration; activities of households and of extraterritorial organisations</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Education</td>
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<td>3</td>
<td>9</td>
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<tr>
<td>Human health and social work activities</td>
<td>43</td>
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<td>43</td>
<td>23</td>
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<tr>
<td>Arts, entertainment and recreation</td>
<td>-3</td>
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<td>-3</td>
<td>-20</td>
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<td>-20</td>
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<tr>
<td>Other service activities</td>
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<td>0</td>
<td>-1</td>
<td>14</td>
<td>0</td>
<td>14</td>
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<tr>
<td>Private real estate activities</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: OECD International Investment Statistics Database
**Positions by ultimate investing country**

To capture another important aspect of direct investment, BMD4 recommends reporting inward positions by **ultimate investing country (UIC)**. This presentation better captures where the investment in a country is coming from. These statistics show the country of the direct investor who ultimately controls the investment and, thus, bears the risks and reaps the rewards of the investment. This presentation can result in substantial changes in the distribution of inward positions by country and provides information on the countries of the direct investors that ultimately control the foreign investments in the reporting economy. Importantly, the presentation by UIC matches the recommended presentations of other statistics on the activities of MNEs, including Activities of Multinational Enterprises (AMNE) statistics (these closely related data are discussed below in the section “Related data sets”).

The ultimate investor is identified by proceeding up the immediate direct investor’s ownership chain until an enterprise is reached that is not controlled by another entity (that is, more than 50% of the voting power is not owned by another entity). If there is no enterprise that controls the immediate direct

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**Figure 7. Comparison of inward positions by immediate investing country and ultimate investing country for France at end-of-year 2012 (US millions)**

![Chart showing comparison of inward positions by immediate and ultimate investing country for France at end-of-year 2012](source: OECD International Investment Statistics Database)
Measuring International Investment by Multinational Enterprises

investor, then the immediate direct investor is the ultimate investor. To convert from the standard presentation by immediate investing country, the entire FDI position attributed to the immediate direct investor is moved from its country to the country of the ultimate investor.

Unlike the presentation by immediate direct investor, the presentation by UIC can show inward investment controlled by investors in the reporting economy; this is inward FDI resulting from round-tripping. Round-tripping is when funds that have been channelled abroad by resident investors are returned to the domestic economy in the form of direct investment. It is of interest to know how important round-tripping is to the total inward FDI in a country because it can be argued that round-tripping is not genuine FDI into an economy.

Figure 7 gives an example of the changes in the country distribution of inward investment when presenting statistics by country of UIC instead of the immediate partner country for France. On the UIC basis, the United States is a much more important investor in France than it appears when presented by immediate partner country. Indeed, the inward stock of the United States increases from USD 79.6 billion to USD 142.1 billion. Much of this increase comes from Luxembourg

Figure 8. Comparison of inward positions by immediate investing country and ultimate investing country for Estonia at end-of-year 2013 (US millions)

Source: OECD International Investment Statistics Database
and the Netherlands; the inward investment stocks from these countries drops considerably, indicating that investors from the United States hold many of their affiliates in France indirectly, through affiliates in Luxembourg and the Netherlands. Investors in other countries also likely hold operations in France indirectly through affiliates in these countries. According to the UIC presentation, French investors are the 8th largest source of FDI into France. As a matter of fact, they replace Japan in the top ten sources of FDI when the statistics are presented according to the UIC rather than by immediate partner country. While this indicates there is some round-tripping of FDI in France, the French position still accounts for less than 4% of the total inward investment position in France.

Figure 8 gives an example of the changes in the country distribution of inward investment when presenting statistics by country of UIC instead of the immediate partner country for Estonia. On the UIC basis, Estonia becomes the second largest source of investment in Estonia, indicating that round-tripping is common in Estonia. Given that Sweden, Finland, the Netherlands, Russia, and Norway become less important as sources of investment when measured according to the ultimate investor, it appears that some of the round-tripping from Estonia is going through some or all of these countries. Other countries that become less important as sources of FDI when measured on the UIC basis include Luxembourg. In contrast, the United States, Austria, Germany and Denmark are all more important sources of direct investment in Estonia than the standard presentation would indicate.
Examples of how to use and interpret FDI statistics

The recommendations in BMD4 make FDI statistics more useful for macroeconomic analyses and for analysing the activities and motivations for FDI. The presentation of the aggregate statistics on an **asset/liability** basis makes the FDI statistics comparable to other items in the **BOP** and **IIP** statistics, supporting macroeconomic analyses. Recommending that countries that host **SPEs** compile FDI statistics excluding resident SPEs removes the double-counting that results from capital-in-transit through these SPEs, providing more accurate statistics on FDI into these countries and originating from these countries. The statistics better capture the direction and degree of influence by the direct investor by extending the directional principle to the treatment of debt between **fellow** enterprises. The recommended supplemental series focus on highlighting specific aspects of FDI, including by the **ultimate investing country**.

There are several different ways that FDI statistics can be used. The discussion below begins with the uses for the two different bases for measuring aggregate FDI statistics: asset/liability and directional. It then discusses the detailed statistical series on flows and stocks and what can be learned from them, particularly, for example, by examining equity and debt separately. Finally, it provides examples of useful indicators that can be created with FDI statistics and how they can be interpreted. This last discussion is organised around common questions asked about direct investment.

**Asset/liability versus directional principle**

Aggregate statistics are available on both the asset/liability and the directional basis. The asset/liability basis classifies financial and income flows and positions according to whether the direct investment transaction or position is an asset or a liability to the reporting economy. This is in contrast to the directional principle which classifies the financial and income flows and positions as to whether the direct investment was by a resident of that economy to another economy (outward) or was an investment by a foreign resident into the economy (inward). Which of these two measures is best to use depends on the purpose of the analysis.

The asset/liability presentation puts the FDI statistics on the same basis as other statistics in the **BOP** and **IIP** accounts. As such, these statistics are most
appropriate for macroeconomic analyses. In addition, using the statistics including resident SPEs is recommended for such macroeconomic analyses because the transactions of SPEs are an integral part of the MNE’s financial transactions and positions and excluding them would severely understate direct investment financial flows and positions at aggregate levels for a given country. The inclusion of these entities promotes symmetry and consistency across countries. For example, looking at the impact of direct investment on the current account of a country, it would be best to use direct investment income receipts and payments measured on an asset/liability basis including resident SPEs. Similarly, comparing direct investment stocks and financial flows to portfolio investment can provide insights into the attractiveness of the economy to direct investors, who are interested in making long term investments that involve undertaking management of the company and likely results in technology transfer and other spill-overs, compared to portfolio investors, who are interested in earning more passive investment income.\(^3\)

The aggregate statistics on a directional basis are useful for examining the motivations and impacts of FDI. It is generally best to use the statistics excluding SPEs because they better represent the actual investment into and out of a country and, thus, the FDI that is more likely to have a significant impact on the economy. The detailed statistics by country and industry on the directional basis are most useful for examining questions, such as which countries are the most important sources of direct investment in the reporting economy and which industries they are investing in.

**Flows and stocks**

Financial flows capture the amount of direct investment in a specific time period—usually a quarter or a year. Similarly, income flows capture the return earned on direct investment during a specific time period. In contrast, stocks capture the cumulative value of direct investment over time. As such, flows are useful for assessing recent developments in foreign direct investment. For example, financial flows give an indication of the amount of investment direct investors are undertaking at a given point in time, so the direction of change in these flows can indicate whether the investment climate is improving or not.

\(^3\) For more information on BOP analysis, see BPM6.
Financial flows consist of three components: equity capital, reinvestment of earnings, and intercompany debt. Equity capital is often associated with new investments, such as greenfield or M&As, even though it can also reflect extensions of capital or financial restructuring. Nevertheless, equity capital flows are often taken as a sign of the amount of new investments related to FDI. Reinvestment of earnings is the portion of earnings that the parent decides to reinvest in the affiliate rather than receive as a dividend and can be an important source of financing for affiliates. This component of financial flows tends to be the least volatile. Changes in the reinvestment of earnings reflect both changes in the earnings of affiliates and in the amount of earnings that parents choose to distribute. The reinvestment ratio is the share of earnings that the parent reinvests. It can be an indication of the parent’s perception of investment opportunities available to the affiliate: if the parent sees the opportunity to make profitable investments in its affiliates, the parent might choose to reinvest more money in them. However, many other factors can influence the share of earnings reinvested. For example, if the parent is in need of cash, they might pay higher dividends. The third component of financial flows—intercompany debt—is the most volatile component of financial flows and is often driven by the short term financing needs within a company rather than larger overall macroeconomic phenomena. As such, intercompany debt is often the most difficult aspect of financial flows to explain. They can switch direction as large loans are received and then paid off. Examining the components of financial flows is important because it can provide insights into the nature of FDI. For example, a drop in inward investment due to repaying an intercompany loan is interpreted differently from a drop in inward investment due to a drop in equity capital flows.

Income flows include income earnings on equity and debt. Income on equity is the earnings of the affiliate, and income on debt is interest receipts and payments associated with intercompany debt. Changes in income, particularly earnings, reflect changes in the profitability of affiliates. As will be discussed below, when compared to the size of the investment position, earnings can show the return on the investments made by the parent in the affiliate.

Positions are the accumulated value of direct investments measured at a specific point in time, such as the end of a quarter or of a year. The proper valuation is market value which values all of the investments made over time at current period prices. If another valuation is used, it misstates the value of the position and likely misstates the value of older investments more as the value of
investments tend to rise over time. The change in the position from one point in time to the next is due not only to the financial flows during the period but also to changes in prices, exchange rates, and other changes in value, such as the write-down of assets. The inward position indicates the overall value of foreign direct investors’ investment in the reporting economy, and the outward position indicates the degree of penetration of resident direct investors in foreign countries. Positions are often used as a base for calculations of things like return on investment or in indicators. Looking at how the position has changed over time, gives an indication of structural changes in the economy, such as opening up to foreign investment.

**Indicators**

This section gives some examples of indicators that can be constructed using FDI statistics. The discussion is organised around common questions about FDI.

- **How important is FDI to a particular economy? To what extent is an economy globalised through FDI?**

These two questions are related because they both ask what role FDI plays in host and home countries. The statistics on a directional basis excluding resident SPEs are best to use in answering these questions because they distinguish between inward and outward investment and because they exclude funds that are simply passing through the economy on their way to another destination via SPEs.

A common way to judge the importance of FDI to an economy is to compare the size of the outward and inward financial and income flows and positions to GDP. By normalising these measures by GDP, it allows for comparisons across countries. Such measures show the extent of globalisation through FDI at a given point in time. For example, the ratio of inward direct investment financial flows to GDP shows the relative attractiveness of the economy to FDI for that time period, and the ratio of inward and outward stocks to GDP shows the extent of globalisation of the economy at a point in time. Looking at how these indicators change over time can shed light on the role of FDI in globalizing the economy over time and can provide information on structural changes in direct investment, such as greater openness to foreign investment. Looking at stocks can give a clearer picture as flows can be significantly affected by one-time events.
GDP is often used to normalize FDI flows and stocks because it is widely available on a timely basis. However, there are other statistics that can provide meaningful measures of the importance of FDI to an economy, including inward investment as a share of gross fixed capital formation. However, care should be taken in interpreting this ratio as FDI flows may be related to changes in ownership of existing capital rather than the formation of new capital, such as with mergers and acquisitions.

- **Which countries are the most important sources of direct investment in a country? Which countries are the most important destinations of direct investment for a country?**

It is possible to construct an indicator showing inward investment for a particular country over total inward investment. These can be constructed with either financial flows or positions, depending on the question; if the question is which country is the most important source of FDI in a specific period, say the most recent quarter, then flows can be used. If instead the question is asking for the most important investing countries on a long term basis, then positions should be used. For inward investment, there are two possible series that can be used to answer this question. The first is the standard series by immediate partner country; it is the most widely available. The second is the supplemental series by ultimate investing country. The latter series is preferable because it identifies the country of the investor who ultimately controls the investment, but it is not as widely available and is available for positions only.

For outward investment, it is also possible to construct an indicator showing investment in a particular country over total outward investment. Again it is best to use directional statistics excluding resident SPEs. However, these statistics will not give a very precise picture when parents in a country channel FDI through SPEs in other countries. The destination of outward investment would be shown best by statistics by the ultimate host country, but such statistics are not yet available. (See the section on “OECD research to further improve the measurement of foreign investment” for more information on statistics looking through non-resident SPEs and by ultimate host country.)
Measuring International Investment by Multinational Enterprises

- Which industries are most important for direct investment?

This can be answered using the standard series by industry of the affiliate and constructing indicators as discussed above for identifying the most important countries for FDI. However, the outward investment statistics may give a distorted picture of the most important industries if parents are channelling their FDI through non-resident SPEs.

- How do the rates of return on FDI compare to the domestic economy and to other types of investment?

The rate of return is an indication of the profitability of an investment. The simplest way to calculate the rate of return is as earnings compared to the stock of investment. It is possible to compare the rates of return on both outward and inward investment to rates of return in the domestic economy as a whole to see how they compare to all businesses for a country. This can also be done by industry. Looking at rates of return over time can indicate whether investments in resident enterprises are becoming more profitable and whether those enterprises are becoming more competitive, but it is important to note that cyclical or structural factors can affect rates of return.

It is also possible to compare rates of return on FDI to other types of investment, such as portfolio investment. For these comparisons, FDI statistics on an asset/liability basis rather than the directional basis should be used.
Related data sets

There are two other data sources that capture other aspects of international investment by MNEs. The first are Activity of Multinational Enterprises (AMNE) statistics, and the second are international mergers and acquisitions (M&A) data.

**Activity of multinational enterprises statistics**

AMNE statistics provide information on the financing and operations of MNEs. They consist of variables measuring their operations, such as turnover (sales), employment, and value added. Generally, the entities covered in AMNE statistics are considered to be a subset of those covered by FDI statistics because they cover only **controlled** affiliates. However, the AMNE statistics can be considered as having broader coverage in a couple of ways. First, they usually include SPEs because SPEs are important providers of services within the MNE. However, given the nature of SPEs, their inclusion will have little impact on many of the variables included in AMNE statistics, such as employment. Second, AMNE statistics cover the full value of the variables for the MNE. FDI statistics, on the other hand, just represent the parent’s claims on the affiliate and, so, are adjusted by the parent’s share of the equity in the affiliate.

There are certain AMNE variables that capture information on the investments of MNEs. For example, AMNE statistics may include information on capital expenditures, which cover investments in new property, plant, and equipment, and on R&D expenditures, which capture some investments into the creation of intangible assets.

AMNE statistics are becoming more useful as the number of countries compiling them increases, and the international standards for compiling AMNE statistics improve. There are things that could make these statistics even more useful, including further developing links between FDI and AMNE statistics as is being done in research conducted by the OECD Working Group on International

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4 There is a closely related dataset, Foreign AffiliaTe Statistics or FATS, that also provide information on the financing and operations of MNEs. While they include similar data, AMNE statistics are generally considered to be more comprehensive because they cover the activities of parent companies as well as affiliates while FATS focuses on the affiliates.
Investment Statistics (see the section “OECD research to further improve the measurement of foreign investment”). Linking AMNE data to other data sources, such as to data on patents and trademarks, on employment, and on trade, would further enhance the usefulness of these data.

**International mergers and acquisitions data**

Data on international M&As are available from private sources. They are the most timely information available on international investments by MNEs, and they are not subject to many of the confidentiality restrictions of FDI statistics from countries because they are corporate events, which means more detail on the transactions are often available. International M&A statistics are not consistent with FDI concepts because they include the full financing of the merger or acquisition and not just the portion attributable to the direct investor, and because they do not capture FDI financial flows not due to M&As, such as the reinvestment of earnings, capital contributions, and most intercompany loans. Nor do they cover income flows or positions. There are no standards for compiling these statistics, so the methodologies may vary from provider to provider. Nevertheless, the FDI financial flows and international M&A data do tend to track together at the global level, so these data can give an indication of the direction of change in FDI flows for a specific period. Finally, they also often provide information on the ultimate investor and ultimate host of investment that can be obscured in FDI statistics if the parent chooses to channel its direct investment in the affiliate through another country.
OECD research to further improve the measurement of foreign investment

At the time that BMD4 was published, there were several items left on the research agenda. These were classified into several broad issues affecting FDI statistics. Below each of these issues is described as well as progress that has been made in addressing them, if any, since BMD4 was published.

Capital in transit

**Capital in transit** is financing that flows through multiple entities before reaching its final destination. It leads to double-counting of FDI financial flows as well as of income and positions. It affects the geographical and industrial distribution of all direct investment statistics. The exclusion of resident SPEs is an important step to removing capital-in-transit from both the inward and outward investment of FDI statistics for countries that are host to a significant number of SPEs. To remove all capital-in-transit from FDI statistics, a method to segregate capital-in-transit flowing through operating affiliates needs to be developed. In addition, the guidance for compiling FDI statistics will need to be maintained and updated in light of developments and innovations in international finance.

Ultimate host country

The counterpart to the statistics by **UIC** would be a presentation by the **ultimate host country**. Compiling statistics according to the ultimate host country would present a more accurate picture of where investors from particular countries are investing and the industries that they are investing in. BMD4 did not provide any guidance or methodology for compiling statistics according to the ultimate host country because substantial conceptual issues remain. These issues include the difficulties in linking specific sources of funding with specific uses and the fact that direct investments made by intermediate enterprises in ownership chains may reflect that not only funding provided by their direct investors, but also funding that these enterprises may have obtained from other sources, such as local owners or lenders. Research will focus first on clarifying the concept of ultimate host country to determine if it is feasible to develop methods to allocate outward investment positions and transactions to ultimate host countries.

Links between FDI statistics and other statistics on MNEs

While FDI statistics are crucial to understanding the direct investment relationship and provide important insights into the economic linkages between economies,
additional statistics are necessary to place these statistics into context, to describe the enterprises in which there is direct investment, measure their activities, and assess their economic impact. Such complementary statistics are required to underpin analyses of the globalisation of production through FDI. AMNE statistics provide such additional statistics.

While both FDI and AMNE statistics cover aspects of the operations of MNEs, they are not based on compatible statistical concepts and definitions, and, therefore, cannot be used in tandem. To use them together requires eliminating the methodological differences which exist between the financial and economic measures of MNEs and developing a comprehensive analytical framework. The OECD Working Group on International Investment Statistics has developed a framework, called the MNE framework, which reconciled the differences in concepts and definitions to provide a workable way of using the two sets of data in tandem.

The MNE framework combines information on cross-border financing from the FDI statistics with information on third party financing, including local financing, and on total assets from the AMNE statistics to provide a complete picture of the financial structure and financing of the MNE. The MNE framework is also a statistical framework that combines financial and economic variables of MNEs so that the links between their financing and real activities can be examined. The OECD is exploring the feasibility of collecting data using the MNE Framework.
Measuring International Investment by Multinational Enterprises

Why the OECD produces the Benchmark Definition of Foreign Direct Investment

FDI is a key driver of international economic integration. With the right policy framework, FDI can provide financial stability, promote economic development and enhance the well-being of societies. Reliable FDI statistics have always been essential for policy makers faced with the challenges of attracting and making the most of international investment. In the early 1980s, the OECD recognised that traditional reporting models could not account for the removal of regulatory barriers for cross-border investments, the evolution of multinational enterprises, and the increasing complexity of their financing through offshore tax jurisdictions and other arrangements. As a result, in 1983, the OECD adopted a new "Benchmark Definition of Foreign Direct Investment" which provided a comprehensive set of rules to improve statistical measures of foreign direct investment.

However, the financing structures of multinational enterprises and other business combinations have continued to evolve in an increasingly globalised market. To adapt the statistical measures to changing economic and financial realities, the OECD adopted in 2008 the 4th edition of the Benchmark Definition of Foreign Direct Investment which sets the world standard for FDI statistics. The 4th edition of the Benchmark Definition serves as a single point of reference for all that is related to FDI and its measurement.

The 4th edition of the Benchmark Definition of Foreign Direct Investment was the result of the work by the Working Group on International Investment Statistics, representing the international community of FDI statisticians and chaired by Mr. Roger De Boeck. The work was undertaken at the request of the OECD Investment Committee and in co-operation with the IMF and other partner international organisations. It was supported by material prepared by the Secretariat of the Working Group, Ayse Bertrand, Senior Statistician in the OECD Investment Division headed by Pierre Poret in the Directorate for Financial and Enterprise Affairs.
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www.oecd.org/investment/statistics.htm