Annex 6

Selected Issues on Direct Investment

A. Introduction

A6.1 This annex focuses on selected issues related to direct investment. It first gives an overview of direct investment by bringing together topics that cut across different chapters, in contrast to the main part of the *Manual,* which is organized according to accounts rather than topics. The annex then goes into detail on specific issues that are particularly relevant to direct investment statistics, namely ultimate ownership and pass-through funds; corporate inversions; public-private partnerships; cash pooling; and greenfield investment and extension of capacity. The compilation of direct investment statistics described in this *Manual* is consistent with the *OECD Benchmark Definition of Foreign Direct Investment, fifth edition*, where additional details can be found.

B. Overview of Direct Investment

A6.2 Direct investment arises when an investor resident in one economy makes an investment that gives control or a significant degree of influence on the management of an enterprise that is resident in another economy. Direct investment statistics cover the investment income and financial flows and positions that arise between parties in a direct investment relationship.

A6.3 Direct investment relationships and associated concepts are defined in paragraphs [6.8–6.24]. More details are available in the description of the Framework for Direct Investment Relationships in Chapter 2 of the *OECD Benchmark Definition of Foreign Direct Investment, fifth edition*. Some important terms are defined briefly in Box A6.1.

A6.4 In operational terms, a direct investment relationship is defined as arising when an entity has equity that gives it voting power of 10 percent or more in the enterprise (paragraph [6.12]). The definition also spells out how control or a significant degree of influence may be achieved by immediate ownership or indirect ownership, by a chain of ownership of enterprises that in turn own other enterprises (paragraph [6.12]). All enterprises that are under the control or influence of the same direct investor are in a direct investment relationship with each other.

A6.5 Whereas a direct investment relationship is defined in terms of voting power, most financial flows and positions between the entities, including loans and trade credit, are classified as direct investment (paragraphs [6.25–6.36]). The only financial flows and positions excluded are debt between selected affiliated financial corporations and financial derivatives (paragraphs [6.28–6.29]). Debt included in direct investment is called "intercompany lending" (paragraph [6.26]). "Funds in transit" or "pass-through funds" refer to funds passing through a direct investment enterprise resident in an economy to an affiliate in another economy, so that the funds do not stay in the economy of the first enterprise (paragraphs [6.33] and [A6.22-A6.23]). Pass-through equity and debt are included in direct investment (unless classified as debt between affiliated financial intermediaries) but may be identified separately (paragraphs [6.33–6.34]).

A6.6 The typical direction of direct investment is from the direct investor to its direct investment enterprise. However, there may also be direct investment in the reverse direction, and between fellow enterprises, as discussed in paragraphs [6.39–6.41]. Whereas the primary presentation of data in this *Manual* is according to whether the item relates to an asset or liability, an alternative presentation called the directional principle, based on the direction of the direct investment relationship, can be derived from the components and is of analytical interest—see paragraphs [6.42–6.45], Box [6.4], and Chapter 2 of the *OECD Benchmark Definition of Foreign Direct Investment, fifth edition*.

A6.7 Issues associated with direct investment positions are discussed in paragraphs [7.14–7.25]. Valuation of equity not listed on a market is discussed in paragraphs [7.15–7.19]. Entities that borrow on behalf of their affiliates are discussed in paragraphs [7.20–7.22].

A6.8 Issues associated with financial account transactions in direct investment are discussed in Chapter 8. Reinvestment of earnings is the corresponding entry to reinvested earnings in the earned income account, and is discussed in paragraphs [8.15–8.16]. The possibility of imputed direct investment flows arising from goods, services, or other items supplied above or below market price or with no payment (i.e., distorted transfer pricing) is discussed in paragraph [8.17]. Corporate inversion and other restructuring are discussed in paragraphs [8.19] and [A6.24-A6.26].

Box A6.1. Direct Investment Terms

Direct investment: A category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. Ownership of 10 percent or more of the voting power is evidence of a direct investment relationship. As well as the equity that gives rise to control or influence, direct investment also includes associated debt (except debt between affiliated financial intermediaries, specified in paragraph [6.28]) and other debt and equity between enterprises that have the same direct investor.

Direct investment relationship: A direct investment relationship arises when an investor resident in one economy makes an investment that gives control or a significant degree of influence on the management of an enterprise that is resident in another economy (paragraph 6.9). All enterprises that are under the control or influence of the same direct investor are in a direct investment relationship with each other. Direct investment covers investment income and financial transactions, other flows, and positions in equity and selected debt instruments between entities in a direct investment relationship.

Direct investor: An entity or group of related entities that is able to exercise control or a significant degree of influence over another entity that is resident of a different economy (paragraph [6.11]).

Direct investment enterprise: An enterprise in one economy subject to control or a significant degree of influence by a direct investor (paragraph [6.11]). An exception is investment funds, which cannot be direct investment enterprises (paragraph [6.24]). A direct investment enterprise is either a subsidiary or an *associate* (paragraph [6.15]).

Control and influence: Control is determined to exist if the direct investor has more than 50 per cent of the voting power in a direct investment enterprise. Such a direct investment enterprise is a subsidiary. *A* *significant degree of influence* is determined to exist if the direct investor has from 10 to 50 percent of the voting power in the direct investment enterprise. Such a direct investment enterprise is an associate. The control or influence may be immediate (through ownership of voting power) or indirect (through ownership of enterprises that in turn have voting power). More detail on the identification of control and influence is given in paragraphs [6.11–6.14].

Fellow enterprises: Enterprises under the influence or control either directly or indirectly of the same direct investor, but neither of the enterprises controls or influences the other enterprise. (paragraph [6.17]).

Affiliates: Enterprises in an immediate or indirect direct investment relationship with each other, or that have the same immediate or indirect direct investor. Affiliates of an enterprise thus consist of its immediate or indirect direct investor(s), its immediate or indirect direct investment enterprise(s), and its fellow enterprise(s).

Reverse direct investment: Direct investment resulting from a direct investment enterprise lending funds to or acquiring equity in its immediate or indirect direct investor, provided it does not own equity comprising 10 percent or more of the voting power in that direct investor (paragraph [6.40]).

A6.9 Issues associated with income on direct investment are discussed in Chapter 12. Reinvested earnings are discussed in paragraphs [12.33–12.36], [12.40–12.47], and [12.96–12.102].

A6.10 In addition, the general accounting rules; issues of residence, institutional units, and sectors; and classification of instruments are also applicable to direct investment. They are dealt with in Chapters 3, 4, and 5 respectively. The case of distorted transfer pricing between affiliated enterprises is discussed in paragraphs [3.77–3.78].

A6.11 The identification of institutional units in the case of branches; notional resident units for ownership of land, other natural resources, or buildings; multiterritory enterprises; joint ventures; quasicorporations identified prior to incorporation; trusts; and special purpose entities (SPEs) are dealt with in paragraphs [4.26–4.52] and pertain particularly to direct investment.

A6.12 Standard components and selected supplementary items, including items related to direct investment, are shown in Annex 14. Because of interest in different types of direct investment, additional breakdowns could be provided on a supplementary basis for components of particular relevance to an economy. Examples include data on mergers and acquisitions (paragraph [8.18]), SPEs (paragraphs [4.86-4.88]), pass-through funds (paragraphs [6.33-6.34] and [A6.22-A6.23]), corporate inversions (paragraphs [8.19] and [A6.24-A6.26]), greenfield investment and extension of capacity (paragraphs [A6.43-A6.44]), industry classification (paragraph [6.50]), and private equity (paragraph [5.24]).

A6.13 Direct investment data may also be classified by partner economy, as discussed in paragraphs [A11.XX-A11.YY]. The partner may be on the basis of the immediate investor or the ultimate investor or host economy, as discussed in paragraphs [A6.16-A6.21].

A6.14 Whereas external accounts data show the international flows and positions, another aspect of the impact of direct investment is on domestic variables, such as employment, sales, value added, and gross fixed capital formation. Statistics that include such variables are called Activities of Multinational Enterprises statistics and are discussed in Chapter 15.

C. Ultimate Ownership and Pass-Through Funds

A6.15 Complex financing and ownership structures of multinational enterprises (MNEs) can inflate direct investment flows and positions as each flow into and out of an economy is counted, even if the funds or income are merely passing through. Consequently, interpreting direct investment statistics becomes challenging, and these statistics fail to reveal the ultimate sources and destinations of direct investment when compiled by immediate partner economy. To address these issues, this section presents supplementary presentations of direct investment by ultimate partner economy and a supplementary identification of pass-through funds. These supplementary presentations aim to improve the interpretability and usefulness of direct investment statistics and are based on the directional principle (see Box [6.4]). More details on ultimate ownership and pass-through funds are available in Chapter 8 of the *OECD Benchmark Definition of Foreign Direct Investment, fifth edition*.

1. Inward direct investment by the ultimate investing economy

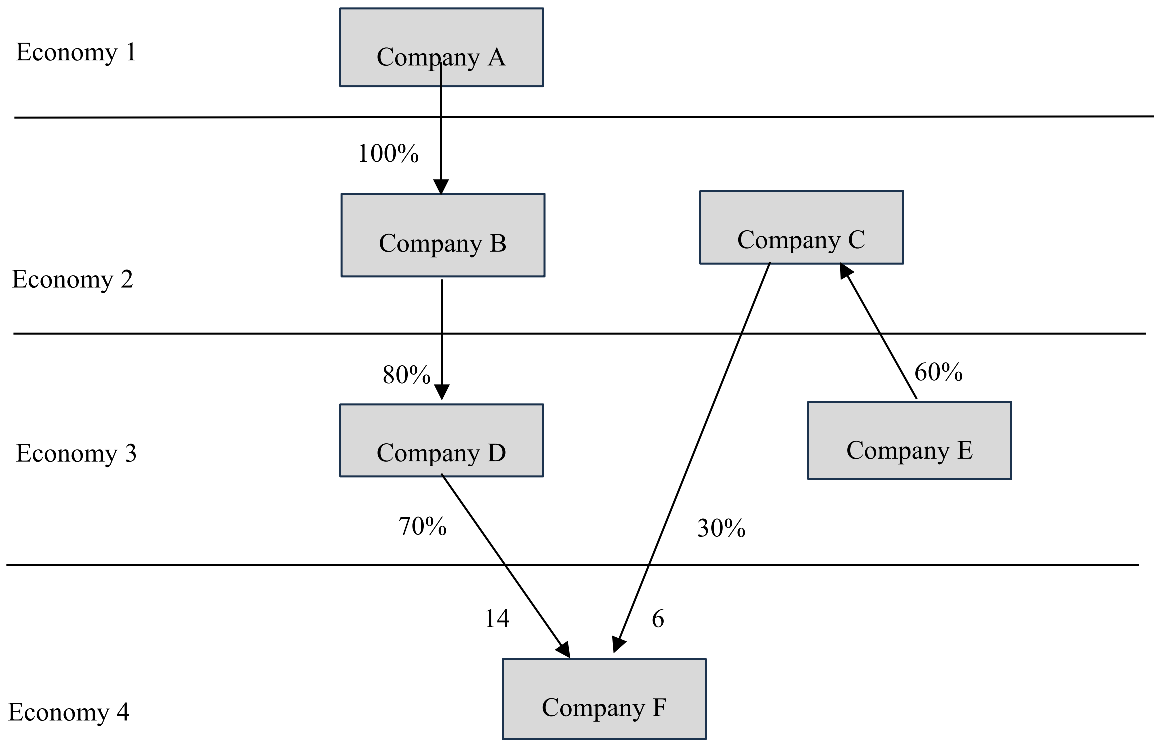
A6.16 Inward direct investment may be broken down by the immediate investing economy (IIE) or the ultimate investing economy (UIE). The IIE refers to the economy of each immediate counterpart, while the UIE attribution is based on the economy of the ultimate controlling parent(s) (UCP). *The UCP is defined as the entity that ultimately controls an enterprise, identified by proceeding up the ownership chain from the enterprise through the controlling links (ownership of more than 50 per cent of the voting power) until an individual, household, or company that is not controlled by another company is reached. If there is no company, individual, or household that controls the resident enterprise, then the resident enterprise may be considered to be its own ultimate controlling parent.* The UIE may be the same as the host economy.

A6.17 Different methods can be employed to identify the UIE. The *Manual* recommends the 'winner takes all' (WTA) method, where the entire inward direct investment flow or position of a resident institutional unit is attributed to the economy of its UCP. An alternative approach is the 'proportional ownership' (PO) method, which assigns each inward direct investment flow or position of a resident institutional unit to the economy of the immediate counterpart's UCP. MNEs often rely on the International Financial Reporting Standards (IFRS) consolidation method, outlined in IFRS 10. This method may prove valuable in identifying the UCP.

A6.18 An example can be used to illustrate the differences between the IIE and UIE (WTA/PO) methods. Figure A6.1 shows the direct investment relationships for Company F that has immediate direct investors and indirect investors along its ownership chain. Economy 4 would record the following under the various methods:

1. **IIE**: Inward direct investment of 6 from Economy 2 (investment from Company C) and 14 from Economy 3 (investment from Company D).
2. **UIE (WTA method)**: Inward direct investment of 20 from Economy 1 since Company A is the UCP of Company F.
3. **UIE (PO method)**: Inward direct investment of 6 from Economy 3 (since Company E is the UCP of Company C) and 14 from Economy 1 (since Company A is the UCP of Company D).

Figure A6.1. Illustration of how to Identify the UIE in Direct Investment Relationships



2. Outward direct investment by the ultimate host economy

A6.19 Outward direct investment may be broken down by the immediate host economy (IHE) or the ultimate host economy (UHE). The IHE refers to the economy of the immediate counterpart to the outward direct investment. To compile direct investment by the UHE, the outward direct investment flows or positions should be reallocated from the immediate counterparts to the economy (or economies) of the entity (or entities) below them in the investment chain. Like for the identification of the UIE, various methods can be deployed to determine the UHE.

A6.20 The *Manual* recommends defining the UHE as the economy of the first operating unit, i.e., the first unit in the investment chain whose purpose extends beyond administrative, management, or asset-holding functions. Figure A6.2 shows the direct investment relationships for Company A. This example can be used to illustrate the breakdowns of outward direct investment according to the IHE and UHE.

Economy 1:

- **IHE**: Outward direct investment of 160 to Economy 2 (investments in Company B and Company C).
- **UHE**: Outward direct investment of 120 to Economy 2 (investment in Company B) and 40 to Economy 3 (investment in Company C reallocated to the first operating unit, i.e., Company E).

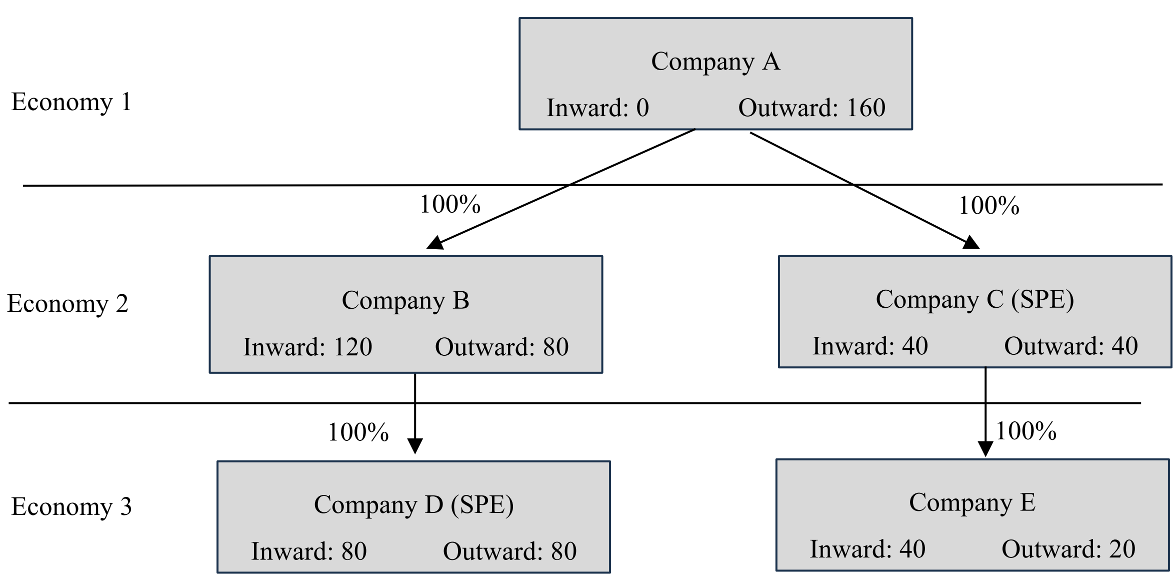
Economy 2:

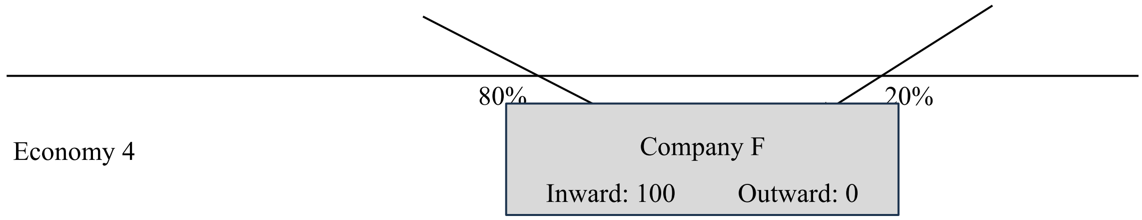
- **IHE**: Outward direct investment of 120 to Economy 3 (investments in Company D and Company E).
- **UHE**: Outward direct investment of 80 to Economy 4 (investment in Company D reallocated to the first operating unit, i.e., Company F) and 40 to Economy 3 (investment in Company E).

Economy 3:

- **IHE**: Outward direct investment of 100 to Economy 4 (investment in Company F).
- **UHE**: Outward direct investment of 100 to Economy 4 (investment in Company F).

Figure A6.2. Illustration of how to Identify the UHE in Direct Investment Relationships





A6.21 More research on the UHE allocation is necessary. For instance, it needs to be determined how to allocate flows and positions when a nonoperating unit in the investment chain invests in multiple affiliates across various economies. Additional approaches for compiling outward direct investment by the UHE could also be considered as described in Chapter 8 of the *OECD Benchmark Definition of Foreign Direct Investment, fifth edition*.

3. Pass-through funds

A6.22 *Pass-through funds—or funds in transit—are funds passing through a direct investment enterprise resident in an economy to an affiliate in another economy, so that the funds do not stay in the economy of the first enterprise.* By separately identifying financial transactions, positions, and associated income flows to and from resident SPEs, a lower-bound estimate of the amount of pass-through funds in an economy can be established. This approach specifically targets funds passing through a subset of affiliates (i.e., SPEs) that are typically established for this purpose. For more information on SPEs, see paragraphs [4.86-4.88] and [15.36-15.93].

A6.23 Presenting inward and outward direct investment according to the UCP of resident entities can be used to estimate the extent of pass-through funds in an economy, as shown in Table A6.1. Cell A identifies inward direct investment into resident entities with a nonresident UCP, and cell B represents the outward direct investment from these entities. The amount in cell B can be seen as an upper-bound estimate of funds simply passing through the host economy, while cell A minus cell B gives an indication of how much of the inward direct investment into foreign-controlled entities remains in the host economy. Cell C identifies the inward direct investment into resident entities with a resident UCP, and cell D represents the outward direct investment from these entities.

Table A6.1. Breakdown of Inward and Outward Direct Investment by Residency of the Ultimate Controlling Parent

	Inward direct investment	Outward direct investment
UCP is nonresident	A	B
UCP is resident	C	D

D. Corporate Inversions

A6.24 *Corporate inversion describes the corporate restructuring of a multinational enterprise group such that the original ultimate controlling parent company in one economy becomes a subsidiary of the new parent in another economy. In addition, ownership of a group of enterprises may be shifted to the new parent company* (see also paragraph [8.19]). The definition clarifies two important aspects that distinguish corporate inversions from other types of operations. First, corporate inversions differ from other cross-border mergers and acquisitions because the acquired company takes an active role rather than being a passive entity, i.e., the acquired company initiates the transaction. Second, corporate inversions differ from other forms of corporate restructurings in that the original parent company becomes a subsidiary of a new parent in another economy. A typology of the most usual cases of corporate inversions or other forms of restructuring with comparable economic effects includes the following four cases:

1. **Pure inversion**: A cross-border restructuring between the original parent company (the inverter) and a nonresident subsidiary, with the new foreign parent company incorporating in the economy of the subsidiary. The subsidiary often holds a negligible amount of assets and liabilities in its balance sheet before the inversion and might have been created for the sole purpose of the inversion. As the inversion is achieved by transactions in financial assets between different entities (often through stock swaps), it usually results in financial transactions being recorded in the financial account.

2. **Inversion by merger**: A cross-border share swap between the shareholders of the original parent company (the inverter) and those of an independent company in a foreign economy, with the new nonresident parent company incorporating in the foreign economy. Like the first case (pure inversion), the inversion is achieved by transactions in financial assets between different entities and usually results in financial transactions being recorded in the financial account.

3. **Born inverted**: An establishment of a new domestic company where a nonresident entity is the owner. The headquarter functions of the MNE remains in the economy of the new domestic company. The establishment of the new domestic company with a nonresident owner typically leads to cross-border financial transactions.

4. **Changing company residence** (also known as transfers of registered offices): A change of residence of a company that does not involve any merger or transaction with another company. Although a change in residence may involve the emigration of an entity to another jurisdiction, it has comparable economic effects as an inversion in the first case (pure inversion). However, the change of residence would be recorded as other change in volume because no financial transactions occurred (see paragraphs [4.167 and 9.21]).

A6.25 While the economy of the direct investor is changed by corporate inversion, the operational structure and ultimate shareholders remain effectively unchanged, but the new parent company typically has the benefit of the taxation and regulatory environment of its economy of incorporation. Because inversions can involve large values in the financial account but with little or no movement in resources, there may be analytical interest in separating them from other direct investment.

A6.26 Economies are encouraged to provide supplementary data on corporate inversions if they are significantly impacted by them. These supplementary data could include financial transactions, positions, and income associated with corporate inversions, not only for direct investment but also for portfolio investment. This is because corporate inversion often involves a portfolio transaction that almost exactly offsets the direct investment transaction. The differing treatment of reinvested earnings on direct investment and portfolio investment tends to increase net earned income of the economy hosting the new parent company, resulting in higher gross national income. However, supplementary recording of reinvested earnings on portfolio investment as described in paragraph [12.36d] could address this asymmetry.

E. Public-Private Partnerships

A6.27 *Public-private partnerships (PPPs) are long-term contracts between a private unit (usually a private enterprise but occasionally a private nonprofit institution) and a public unit for the provision of a public asset or set of assets and related services in which the private party acquires, builds, or refurbishes an asset, operates the asset for the contract period, and bears significant risk and management responsibility.* Such arrangements are particularly relevant for the external accounts when they involve a private unit and a public unit that are resident in different economies. There are many types of PPP arrangements, described variously as Private Finance Initiatives (PFIs), Build-Operate-Transfer schemes (BOTs), Build-Own-Operate-Transfer schemes (BOOTs), Design-Build-Operate schemes (DBOs), Design-Build-Finance-Operate schemes (DBFOs), concessions, and so on.

A6.28 Governments engage in PPPs for several reasons, including the hope that private management may lead to more efficient production, the desire to defer or spread payment obligations, and to benefit from access to a broader range of financing sources. During the contract period, the PPP contractor operates the asset and assumes the associated risk and has the economic ownership. The legal ownership of the assets during the contract period depends on the terms of the contract and the applicable laws. Usually, once the contract period is over, the asset is transferred to the public sector, leaving the government with both economic and legal ownership. (An asset's economic owner can differ from its legal owner, as economic ownership in the external accounts is based on who bears the majority of the risks and rewards, and economic ownership in the external accounts may also differ from ownership of PPP assets in business accounts based on control over the assets).

A6.29 PPP contracts vary in their terms concerning the operation and maintenance of the assets during the contract period and the disposition of the assets at its end, and in the standards for the price, quality, and volume of the services to be supplied. A common type of arrangement is for a private enterprise to acquire a complex of fixed assets and then use those assets to produce services delivered to the government, either for use as an input to its own production (for example, motor vehicle maintenance services) or for distribution to the public without payment (for example, education services). If the services are to be distributed to the public, the government will make performance-based periodic payments linked to the asset's availability and the delivery of the related services. Alternatively, in a concession arrangement, the private enterprise builds or acquires assets, then uses those assets to sell services to the public (for example, a toll road). In either case, the payments to be received by the private enterprise are expected to cover its costs and allow it to earn an adequate rate of return on its investment.

A6.30 There can be many variations in PPP contracts regarding the legal ownership of the asset during the contract period, the disposition of the assets at the end of the contract, the required operation and maintenance of the assets during the contract, the price, quality, and volume of services produced, and so forth. At the end of the contract period, the government may gain legal and economic ownership of the assets without payment.

A6.31 Even though the private enterprise is responsible for constructing or acquiring the fixed assets, the financing may be provided by the government or facilitated by a government guarantee, and the contract may require that the assets meet the design, quality, and capacity specified by the government. The contract may also require that the assets be used in the manner specified by the government to produce services and be maintained in accordance with standards specified by the government. Furthermore, the assets typically have longer service lives than the contract period, so that the government will control the assets, bear the risks, and receive the rewards for a significant portion of the assets' service lives. Thus, it frequently is not obvious whether the private enterprise or the government bears the majority of the risks and reaps the majority of the rewards.

A6.32 As with operating and financial leases, the economic owner of the assets of a PPP is determined by assessing which unit bears the majority of the risks and which unit is expected to receive a majority of the rewards of the assets. The factors to consider in making this assessment can be broadly divided into two groups, those associated with acquiring the asset and those associated with using it in production. Some of the risks associated with acquiring the asset are:

a. The degree to which the government controls the design, quality, size, and maintenance of the assets;

b. Construction risk, which includes the possibility of additional costs resulting from late delivery, not meeting specifications or building codes, and environmental and other risks requiring payments to third parties.

Some of the risks associated with using the asset in production are:

a. Supply risk, which covers the degree to which the government is able to control the services produced, the units to which the services are provided, and the prices of the services produced;

b. Demand risk, which includes the possibility that the demand for the services, either from government, or from the public at large in the case of a concession arrangement, is higher or lower than expected

c. Residual value and obsolescence risk, which includes the risk that the value of the asset will differ from any price agreed for the transfer of the asset to government at the end of the contract period;

d. Availability risk, which includes the possibility of additional costs or the incurrence of penalties because the volume and/or quality of the services do not meet the standards specified in the contract.

A6.33 The relative importance of each factor is likely to vary with each PPP. It is not possible to state in advance a set of prescriptive rules that will be applicable to every situation. The provisions of each PPP must be evaluated in order to decide which unit is the economic owner.

A6.34 Likewise, the complexity and variety of PPP contracts preclude the enumeration of detailed rules governing the transactions to be recorded concerning the control and use of the assets. Instead, the facts and circumstances of each contract should be considered, and an accounting treatment should be selected that best brings out the underlying economic relationships. There are, however, a few common difficulties.

A6.35 If the private enterprise is assessed as being the legal owner during the contract period and if, as usual, the government obtains legal and economic ownership at the end of the contract without an explicit payment, a transaction must be recorded for the government's acquisition of the assets. One approach is for the government gradually to build up a financial claim and the private unit gradually to accrue a corresponding liability such that the value of both is expected to be equal to the residual value of the assets at the end of the contract period. At the end of the contract period, the government records the acquisition of the asset and the disappearance of the financial claim, and the private unit records the disposal of the asset and the disappearance of the liability for the claim. Implementing this approach requires existing monetary transactions to be partitioned or new transactions to be imputed using assumptions about expected asset values and interest rates.

A6.36 A simpler alternative is to record the change of legal and economic ownership as a capital transfer occurring in the same period as the change in ownership. This approach does not reflect the underlying economic reality as well, but data limitations, uncertainty about the expected residual value of the assets, and contract provisions allowing various options to be exercised by either party could make recording a capital transfer acceptable on pragmatic grounds.

A6.37 If the government is assessed as being the economic owner of the PPP asset during the contract period but does not make any explicit payment at the beginning of the contract, transactions must be imputed to cover the acquisition of the asset. An acquisition via a financial lease may be imputed because of the similarity with actual financial leases. The details of the implementation of this approach depend on the specific contract provisions, and possibly other factors, but in general, a loan structured as financial lease is imputed. If there are actual government payments to the private unit, they could be partitioned so that portions of each payment go towards imputed payments of principal and interest on the loan. If there are no actual government payments (as in a concession arrangement), part of the payments from the public for use of the asset may be re-routed through the government, with the imputed revenue being used by the government for imputed payments of principal and interest on the loan.

A6.38 PPPs can impact direct investment statistics in different ways. For instance, direct investment income and financial flows may increase if the private unit participating in the PPP is a direct investment enterprise. In addition, when a private nonresident unit participates in a PPP and becomes the economic owner of an immobile nonfinancial asset (such as land or a building) within the compiling economy, a notional resident unit must be created. This notional unit is treated as the owner of the asset (see paragraph [4.65]). Consequently, a direct investment relationship emerges between the nonresident unit (the direct investor) and the notional unit (the direct investment enterprise). Even if the nonresident unit is not the economic owner of an asset in the PPP arrangement, a direct investment relationship may still need to be established. For example, major construction projects that span a year or more and are managed through a local site office usually satisfy the criteria for identifying a branch (as described in paragraph [4.60]). In such cases, there would be a direct investment relationship between the nonresident unit (the direct investor) and the branch (the direct investment enterprise).

F. Cash Pooling

A6.39 Cash-pooling arrangements provided by banks allow corporations to externalize the intra-group cash management, enabling them to manage their global liquidity more effectively and at lower costs. Financial innovation has addressed the needs of corporate groups to manage funds in a centralized way by creating different cash-pooling arrangements. These are agreements between a bank and the entities of a group, which can be located in the same or in different economies, allowing for pooling of cash in real time.

A6.40 The three main types of cash-pooling arrangements are as follows:

1. **Single legal account***:* Consists of (a) a set of virtual transactions/operational sub-accounts, which are used directly by the individual companies in the group, as well as the parent company, for their day-to-day operations; and (b) a top/master group account (usually held by the parent company), which constitutes an obligation of the pooling bank vis-à-vis the beneficiary and concentrates the funds of the group. The virtual sub-accounts only track the intra-group positions and are not in a direct relationship with the bank. The information on virtual transactions usually is part of the service provided by the pooling bank to the client but are not necessary for the bank's accounting system. From the point of view of the bank, only changes in the top/master account should be reported as this will reflect changes in its claims vis-à-vis the parent company, the only direct client in this type of cash pool.

2. **Physical cash pool**: Each company that participates in the cash-pooling arrangement holds an account with the pooling bank. In addition, there is a master account that usually is held by the parent

company. The balances of the surplus accounts are transferred to the master account on a regular basis (e.g., daily at close of business). Conversely, the parent company transfers liquidity from the master account to the accounts in deficit at the end of the period (e.g., day). In that sense, they are all counterparties of the bank, and the deficit balances from pooling participants appear only temporarily as assets on the bank's balance sheet. There are two types of physical cash pools. In a zero-balancing cash pool, the full balance of the surplus accounts is transferred to the master account on a regular basis. The target-based cash pooling specifies a (positive) threshold whereby liquidity is transferred to the master account from individual accounts when the balances of individual accounts exceed the threshold, and conversely, liquidity is transferred from the master account to individual accounts when their balances are below the threshold.

3. **Notional cash pool**: As in the physical cash pool, all the bank accounts represent a legal relationship between the pooling bank and the participating entities, which are thus direct counterparties of the bank. The pooling is performed by the bank by creating a notional top/master account that virtually consolidates the positions of the pooling participants but does not represent a resource or an obligation of the bank. As a result, no liquidity transfers resulting in inter-company loans take place. The funds will remain in the assets of the bank as a loan to a particular participating entity. However, following the structure of the cash pooling, the loan is guaranteed by the cash pooling members, subject to lower charges, restrictions, and implicit interest, and typically can only be drawn upon to the extent that the overall pool has a positive net balance.

A6.41 The recording of cash-pooling arrangements in the external accounts is complex and depends on the identification of the actual debtor and creditor instead of the payment service provider. The parent company and its subsidiaries should be able to report the internal booking entries as intercompany lending, i.e., as assets or liabilities depending on the direction of the funds. The presence of cash-pooling arrangements between affiliated parties needs to be identified via direct investment surveys when they take the form of single legal account or physical cash pool.

A6.42 Table A6.2 summarizes the statistical treatment for the different types of cash-pooling arrangements from the perspective of the compiling economy of the participant subsidiaries. If an overdraft or loan is received by a pooling participating subsidiary and covered by a single legal account or a physical cash pool, the creditor is the parent company (the holder of the top/master account), and the recording is done as intra-group loans in direct investment (except for the debt between affiliated financial intermediaries).[1] However, if the overdraft or loan is based on a notional cash pool, the creditor is the pooling bank, and the recording is done as other investment between the pooling bank and participating entities.

Table A6.2. Summary of the Treatment of the Participation of a Subsidiary in a Cash-Pooling Arrangement

Types of cash-pooling arrangements		Instrument/Functional category		Counterpart
		Asset	Liability	
Single legal account (SLA)		Debt instruments/direct investment[1]	Debt instruments/ direct investment[1]	Owner of SLA
Physical cash pool with a master account (MA)	Zero-balancing	Debt instruments/ direct investment[1]	Debt instruments/ direct investment[1]	Owner of MA
	Target-based	Deposits (up to the target) Debt instruments/direct investment[1]	Loan/Other investment Debt instruments/ direct investment[1]	Bank Owner of MA
Notional cash pooling		Deposits/Other investment	Loan/Other investment	Bank

Note: 1. Except for the debt between affiliated financial intermediaries that should be included under other investment. Debt instruments refer only to deposits and loans following the convention that if a bank is the debtor, the instrument takes the form of deposits, otherwise the instrument is a loan.

G. Greenfield Investment and Extension of Capacity

A6.43 *Greenfield investment (GI) comprise investments in direct investment enterprises established within the last three years. Extension of capacity (EC) comprise capital injections that are used to expand the capacity of direct investment enterprises that have existed for three years or more.* Economies are encouraged to provide supplementary data on GI and EC transactions for (i) equity (other than reinvestment of earnings),

[1] In a target-based cash pool, the creditor is the pooling bank for amounts up to the target threshold, and the recording is done as other investment between the pooling bank and participating entities.

(ii) reinvestment of earnings, and (iii) debt instruments. The recording should be on net transactions in inward direct investment and should exclude pass-through funds if possible. Ideally, GI and EC statistics should include an industry breakdown by the direct investment enterprise and a geographical breakdown by the ultimate controlling economy.

A6.44 The method recommended in the *Manual* follows the *transaction approach*, which focuses on the direct investment funds received by the direct investment enterprise. An alternative method is the *capital approach*, which considers gross fixed capital formation expenditures by direct investment enterprises. While the capital approach provides a direct measure of new capacity, it extends beyond the boundaries of direct investment by measuring gross fixed capital formation regardless of the source of financing. Consequently, it may include gross fixed capital formation financed domestically or by nonresident unrelated parties. More details on greenfield investment and extension of capacity are available in Chapter 9 of the *OECD Benchmark Definition of Foreign Direct Investment, fifth edition*.