ISBN 978-92-64-04573-6
OECD Benchmark Definition of Foreign Direct Investment
Fourth Edition

Chapter 7

Classification of FDI by Economy and Industry

7.1. Summary

345. The classification of investment by partner country and by industry sector are the two major dimensions required in presenting more detailed analyses of foreign direct investment (FDI) statistics under the directional principle. These detailed directional data are complementary with the FDI assets and liabilities aggregates also recommended by this *Benchmark Definition* and published as a part of the balance of payments and international investment position statistics. This chapter describes the recommended methodology for presenting these detailed breakdowns of direct investment statistics by partner country and industry sector under the directional principle.

346. In summary, for a reporting economy under the directional principle:

i) FDI statistics should be compiled by immediate partner country using the debtor/creditor principle. Ideally, the geographical allocation should exclude resident Special Purpose Entities (SPEs) and "look through" non-resident SPEs involved in investment chains and should reflect the first non-SPE host/investing country. However, given the practical difficulties involved for compilers, this *Benchmark Definition* recommends the use of both standard and supplemental presentations for dealing with the statistics concerning SPEs. In addition, it is strongly encouraged that supplemental inward FDI position statistics be compiled on an ultimate investing country (UIC) basis.

ii) FDI statistics by sector of industrial activity should be compiled on a similar basis to that outlined for partner country above. Each direct investor/direct investment enterprise should be classified to a single industry, according to the main activity of the enterprise. As a core requirement, industry classification of positions and transactions should be compiled according to the activity of the direct investment enterprise (and on a supplemental basis according to the activity of the direct investor) for both inward and outward investments. In addition, the compilation on a supplemental basis of inward FDI position statistics according to the industrial sector of the ultimate investing country is encouraged.

iii) FDI statistics cross-classified by country and industry can be presented at a more aggregate level of industry classification taking into account confidentiality concerns which may limit dissemination of disaggregated data.

iv) FDI equity by type for merger and acquisition (M&A) transactions compiled by partner country and by industrial sector is strongly encouraged on a supplemental basis. When dissemination of such data is limited due to confidentiality, data can be presented for higher partner country or industry aggregates. This present edition of the *Benchmark Definition* limits the FDI data by type to M&A and the residual element.

 OECD BENCHMARK DEFINITION OF FOREIGN DIRECT INVESTMENT: FOURTH EDITION – ISBN 978-92-64-04573-6 – © OECD 2008

7.2. Attribution to an economy[44]

7.2.1. General principles to identify home and host economies

347. Direct investment statistics, *i.e.* financial transactions and positions and associated income flows, should be compiled under the *directional principle* described in Chapter 3 and Chapter 4. The statistics should be published for all partner countries individually as well as for major geographical regions or economic zones and currency or monetary unions. Country and regional statements are of prime importance to direct investment statistics. In addition to analytical uses of such detailed information (see Chapter 2), bilateral data provide valuable information to compilers to identify and to examine at a more detailed level potential quality concerns in the data when large differences arise in bilateral comparisons.

348. Notwithstanding the general guidance above for compiling direct investment statistics, compilers have obligations to protect confidentiality of sensitive data. Their obligations to protect data may at times limit their ability to disseminate transactions/positions at the level of an individual economy. When necessary, compilers are encouraged to combine individual country data in higher aggregates that allow the release of as much geographical detail as their confidentiality constraints allow.

349. In general, the organisational structures of multinational enterprises (MNEs) are changing more frequently than before. These changes may impact on the allocation of FDI to an economy, especially as a particular counterpart within an MNE may cease to exist, or where FDI interactions occurring with one partner country up to a point in time may change to another partner country. The methodology to record standard and supplemental FDI series is described in Chapter 4. The detailed requirements of the standard and supplemental FDI series are given in Annex 2 including the country codes to be used.

350. There are two principles that may serve as the basis for geographic allocation of direct investment transactions /positions: the *debtor/creditor principle*, which is recommended by this *Benchmark Definition*, and the *transactor principle* (which is not recommended). According to the debtor/creditor principle, geographic allocation is made according to the economy of residence of the direct investment enterprise or direct investor, even if the funds are paid to or received from another economy. According to the transactor principle, which is not recommended here, direct investment transactions should be allocated to the economy to which the funds are payable or from which the funds are receivable, even if this is not the economy of the direct investment enterprise or the direct investor. In other words, under the debtor/creditor basis, changes in financial claims of the reporting economy are properly allocated to the economy of residence of the non-resident debtor, and changes in liabilities are properly allocated to the economy of residence of the non-resident creditor. Under the transactor basis, changes in the claims and liabilities are allocated to the economy of residence of the non-resident party involved in the settlement of the transaction (the transactor).

351. There are two possible approaches to identify the home country (of the direct investor) for inward FDI and the host country (of the direct investment enterprise) for outward FDI:

- *i)* by immediate host country/investing country (IHC/IIC),
- *ii)* by ultimate host country/ultimate investing country (UHC/UIC).

44. Also referred to as partner country attribution or geographical attribution

352. While the identification of IHC and IIC is generally straightforward that of UIC is more complex and that of UHC even more so. Compilers in countries with well developed business registers that include the ownership links of their MNEs (often limited to control links only) may find these of assistance in identifying the UIC. It may also help with the UHC but as the outward FDI may pass through an influence link (and the fact that outward chains of FDI can split) mean that further investigation beyond the business registers is needed to identify the UHC. This *Benchmark Definition* recommends a supplemental presentation by the UIC. Identification of the UHC remains the subject of further research (Annex 13).

7.2.2. Standard and supplemental geographical presentations

353. The standard geographical presentational requirement recommended is that all inward and outward FDI transactions, positions and associated income flows be compiled for the reporting economy on a directional basis, excluding resident SPEs, according to the host (outward FDI) or investing (inward FDI) economy of residence of the immediate partner. This parallels the debtor/creditor principle as it is the country to which the funds are payable, or from which the funds are receivable that determines the actual host/investing country.

354. Moreover, the standard geographical presentation also requires, on the same basis, that the reporting economy presents separately FDI transactions, positions and associated income flows of all its resident SPEs. This presentation of the core data facilitates users assessing the impact of SPE activity in individual economies and also helps in reconciling the directional data with the overall FDI asset/liability based aggregates.

355. On a supplemental basis, compilers are strongly encouraged to compile four sets of additional FDI data (see also Chapter 4):

i) The first supplemental data request concerns inward and outward FDI data (transactions, positions and income) according to the directional principle excluding resident SPEs and looking through non-resident SPEs, involved in inward or outward FDI investment chains. The data should show the partner country analysis as determined by the first non-SPE encountered for inward and outward investment chains. For outward FDI, the data reflect the economy of the first non-resident non-SPE subsidiary, associate or unincorporated enterprise (including branch) which is a direct investment enterprise. For inward FDI, the data reflect the economy of the first non-resident non-SPE investor which is a direct investor. This analysis facilitates users assessing the impact of FDI on economies in terms of the most immediate source and destination of investment when the impact of SPEs is removed from the data.

ii) The second supplemental data request concerns inward and outward FDI data (transactions, positions and income) according to the directional principle (as defined in Chapter 4) including all entities whether SPEs or not. The data should show the economy of residency of the immediate partner for both inward and outward investment. These data provide historical consistency and may facilitate cross country analysis as they are on the same basis as the 3rd edition of the *Benchmark Definition*.

iii) The third supplemental data request concerns inward and outward FDI equity flows showing information on M&A according to the directional principle. The

 OECD BENCHMARK DEFINITION OF FOREIGN DIRECT INVESTMENT: FOURTH EDITION – ISBN 978-92-64-04573-6 – © OECD 2008

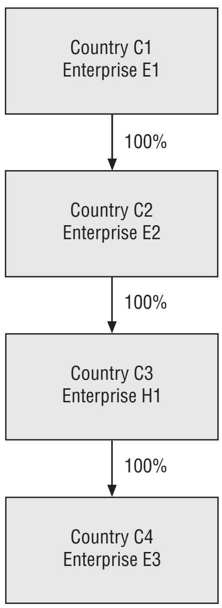
data should show inward and outward transactions (not positions) concerning the purchase/sale of existing equity classified according to the economy of residency of the first non-SPE. This analysis facilitates users in determining the extent to which investment activity relies on M&A as opposed to other modes of FDI activity.

iv) The fourth supplemental data request concerns inward FDI positions for equity and debt according to the ultimate investing country (UIC). This analysis facilitates users in determining the location of the ultimate source of control of the stocks of inward FDI for a reporting economy. As mentioned requirements for outward FDI data according to the ultimate host country are the subject of further research.

356. While compilers will necessarily take account of possible confidentiality constraints in disseminating results, such presentations should be developed with the maximum possible level of detail for individual economies to be of most help to data users.

357. The simple example illustrated in Figure 7.1 below is included to demonstrate the basic approach towards preparing standard and supplemental geographical data under the directional principle (although in reality business combinations may be much more complex). An ultimate parent company in economy C1 (E1) acquires existing shares (10% or more) of a subsidiary company in economy C2 (E2). The latter company makes an equity investment in its direct investment enterprise in economy C4 (E3) through its SPE holding company in economy C3 (H1). E2 in C2 also provides a loan directly to enterprise E3 in C4.

Figure 7.1. **Example of Immediate Investor Country (IIC) and Ultimate Investing Country (UIC)**



358. In Figure 7.1, H1 in country C3 is the immediate direct investor in E3 in country C4 and hence C3 is the immediate investor country for E3. Similarly C2 and C1 are the immediate investor countries for H1 and E2 respectively. As E1 is the ultimate controlling investor in all of the enterprises below it, C1 is the ultimate controlling investor country for each of these enterprises.

359. More complex examples can be constructed in which multiple chains of ownership emanate from a given direct investment enterprise. However, the allocation principles that should be followed are the same as those described above, with the investment in each chain individually allocated to immediate and, alternately ultimate investing countries.

360. For the first standard geographical presentation (excluding resident SPEs), reporting (for example) by economy C3 and C4 should be as follows:

- *Inward/outward direct investment country allocation (excluding resident SPEs):*
  - ❖ Because a resident SPE is involved in the investment chain, C3 (H1) will show no inward investment from C2 (E2). For the same reason, C3 will show no outward investment to C4 (E3).
  - ❖ C4 (E3) will show inward investment from the holding company H1 in C3.
  - ❖ C4 (E3) will record under inward investment the loan transaction and position from the parent (E2) for country C2.

361. For the second standard geographical presentation showing the activity of resident SPEs, reporting (for example) by economy C3 should be as follows:

- *Inward/outward direct investment country allocation for resident SPEs:*
  - ❖ Because a resident SPE is involved in the investment chain, C3 (H1) will show inward investment from C2 (E2) and C3 will show outward investment to C4 (E3).

362. For the first supplemental geographical presentation of FDI excluding or looking through all SPEs whether resident in the reporting economy or not, reporting (for example) by economy C3 and C4 should be as follows:

- *Inward/outward direct investment country allocation excluding all SPEs:*
  - ❖ Because a resident SPE is involved in the investment chain, C3 (H1) will show no inward investment from C2 (E2). For the same reason, C3 will show no outward investment to C4 (E3).
  - ❖ C4 (E3) will look through SPE holding company H1 in C3 and record under inward investment the equity transaction and position from its parent enterprise E2 for country C2 as this is the first non-SPE in the inward investment chain.
  - ❖ C4 (E3) will record under inward investment the loan transaction and position from the parent (E2) for country C2.

363. For the second supplemental geographical presentation of FDI including all entities with allocation according to immediate partner country, reporting (for example) by economy C3 and C4 should be as follows:

- *Inward/outward direct investment country allocation including all entities:*
  - ❖ C3 (H1) will show inward investment from C2 (E2) and C3 will show outward investment to C4 (E3) even though H1 is an SPE.
  - ❖ C4 (E3) will show inward investment from the SPE holding company H1 in C3.
  - ❖ C4 (E3) will record under inward investment the loan transaction and position from the parent (E2) for country C2.

OECD BENCHMARK DEFINITION OF FOREIGN DIRECT INVESTMENT: FOURTH EDITION – ISBN 978-92-64-04573-6 – © OECD 2008

364. For the third supplemental geographical presentation of FDI showing mergers and acquisitions transactions data for equity only according to the first non-SPE partner economy, reporting (for example) by economy C1, C2 and C4 should be as follows:

- *Mergers and acquisitions transactions country allocation:*
  - ❖ C1 (E1) will record the outward direct investment equity transaction (only) to show the acquisition of E2 in C2.
  - ❖ C2 (E2) will record the inward direct investment equity transaction (only) to show the acquisition by E1 in C1 of E2. If, prior to its acquisition by E1, E2 had an existing direct investor then it will be necessary for C2 to record the relevant disinvestment as well under inward direct investment (mergers and acquisitions).
  - ❖ C2 (E2) will record the outward direct investment equity transaction (only) to show the acquisition of E3 in C4.
  - ❖ C4 (E3) will record the inward direct investment equity transaction (only) to show the acquisition by E2 in C2 of E3. If, prior to its acquisition by E2, E3 had an existing direct investor then it will be necessary for C4 to record the relevant disinvestment as well under inward direct investment (mergers and acquisitions).

365. For the fourth supplemental geographical presentation of FDI showing inward FDI positions according to the economy of location of the investor of the ultimate investing country (for example) reporting by economy C4 should be as follows:

- *Inward direct investment positions ultimate investing country allocation:*
  - ❖ C4 (E3) will allocate all inward equity positions, emanating from C2 (E2) via C3 (H1), to the ultimate controlling parent E1 resident in country C1 (*i.e.* not to country C2 (E2) or to C3 the location of the holding company H1) as E1 is the ultimate controlling parent of the investor H1;
  - ❖ C4 will record inward loan (debt) positions from the parent (E2) in country C2 to country C1 (E1), the ultimate investing country of the controlling parent as E1 is the ultimate controlling parent of the investor E2.

7.3. Industry classification

7.3.1. General principles to identify industry allocation

366. There is significant interest in the industry classification of both direct investment enterprises and their direct investors. Direct investment enterprises and direct investors engage in a variety of economic activities. For a comprehensive economic analysis, enterprises should be grouped by type of economic or industrial activity. Under ideal circumstances, data should be available to compilers to classify both inward and outward direct investment on a dual basis to the industry of the direct investment enterprise and the industry of its direct investor. Compilers are requested to present direct investment statistics on a directional basis and classified according to the economic activity of the counterparts involved.

367. If data for both inward and outward direct investment cannot be compiled on both of these bases, the *Benchmark Definition* recommends that data be compiled *at least* according to the activity of the direct investment enterprise, for both inward and outward direct investment. In other words, inward direct investment should reflect the industry of the resident direct investment enterprise and outward investment should reflect the industry of the non-resident direct investment enterprise. Compilers are encouraged to provide on

a supplemental basis the inward and outward investment data according to the economic activity of the direct investor.

368. Each direct investor and each direct investment enterprise must be classified to a single industry, even though many direct investors and direct investment enterprises are involved in a wide range of activities. The industry classification of the enterprise should be based on its principal economic activity. Ideally, the principal activity can be determined on the basis of which activity contributes most to the value added of the enterprise. In some cases, it is recognised that data on value added may not be available and that data on sales, revenues, or payroll or other basis may need to serve as a proxy. The detailed requirements of the standard and supplemental FDI series are given in Annex 2 including the industry codes to be used.

369. A direct investor involved in a wide range of activities may make its overseas investment in each activity through numerous separate domestic subsidiaries specialising in a given activity, or it may make all of its overseas investment through a single domestic subsidiary established to handle overseas investments or a mixture of these approaches. For data that are presented based on the industry of the direct investor, the industry corresponds to the main activity of the direct investor, including all of its activities in its own country of residence. This approach avoids distortions due to different organisational arrangements.

370. Data that are presented based on the industry of the direct investment enterprise should be based on the reporting enterprise. (If the reporting unit is a direct investment enterprise and, at the same time, a direct investor, its industry classification should be based on the activities that it conducts and should exclude those conducted by its own FDI enterprises.) It is recommended that the industry of the enterprise represents the principal activity of that enterprise, including all of its subsidiaries, associates and branches in its country of residence.

371. When a change in the industry classification of a direct investor or direct investment enterprise occurs, the reclassification of positions from one industry to the next should be recorded as arising from volume adjustments as discussed in Chapter 4.

7.3.2. Standard and supplemental industrial activity presentations

372. The two standard presentations required for the geographical analysis (see Section 7.1.2) are also required for the industrial or economic activity analysis:

i) The standard industrial activity presentational requirement recommended is that all FDI transactions, positions and associated income flows be compiled for the reporting economy on a directional basis, excluding resident SPEs, according to the industrial activity of the resident direct investment enterprise involved for inward investment and of the direct investment enterprise abroad for outward investment.

ii) As for the partner country allocation, the standard presentation requires the reporting economy presents on the same basis all FDI transactions, positions and associated income flows of all its resident SPEs.

373. All of the supplemental presentations required for the geographical analysis are also required for the industrial or economic activity analysis based on the activity of the direct investment enterprise involved.

i) The first supplemental data presentation concerns inward and outward FDI data (transactions, positions and income) according to the directional principle excluding resident SPEs and looking through non-resident SPEs involved in inward or outward FDI investment chains. The presentation should show an analysis according to the industrial activity of the direct investment enterprise involved *i.e.* that of the resident direct investment enterprise for inward investment, and that of the first non-SPE encountered for outward investment chains.

ii) The second supplemental data presentation concerns inward and outward FDI data (transactions, positions and income) according to the directional principle including all entities whether SPEs or not. This presentation should facilitate cross-country analysis by industry.

iii) The third supplemental data presentation concerns inward and outward FDI data showing information on mergers and acquisitions according to the directional principle. The data should show inward and outward equity transactions (only) concerning the purchase/sale of existing equity classified according to the industrial activity of the direct investment enterprise involved *i.e.* that of the resident direct investment enterprise for inward investment and that of the first non-SPE enterprise abroad for outward investment.

iv) The fourth supplemental data presentation concerns inward FDI positions for equity and debt according to the industry of the ultimate investing country. This analysis complements the supplemental country analysis according to ultimate investing country.

374. Additional supplemental industrial activity presentations are encouraged whereby the above requirements (*i.e.* two standard and four supplemental, giving data classified according to the industrial activity of the inward/outward direct investment enterprise) would be repeated but with the analysis based on the industrial activity of the inward/outward direct investor.

7.3.3. International Standard Industry Classification (ISIC)

375. Countries should compile data by industries that correspond to the major tabulation categories in the United Nations' ISIC (or NACE equivalent). The major categories in ISIC Revision 4 (and which are common to NACE Rev. 2) are:[45]

A) Agriculture, forestry and fishing

B) Mining and quarrying

C) Manufacturing

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

E) Water supply, sewerage, waste management and remediation activities

F) Construction

G) Wholesale and retail trade

H) Transportation and storage

I) Accommodation and food service activities

J) Information and communication

K) Financial and insurance activities

45. Recognising the revisions of ISIC, the *Benchmark Definition* recommends that compilers should adjust industry classifications to all subsequent revisions of ISIC.

L) Real estate activities

M) Professional, scientific and technical

N) Administrative and support services

O) Public administration

P) Education

Q) Human health and social work

R) Arts, entertainment and recreation

S) Other services activities

T) Activities of households as employers of domestic personnel; undifferentiated goods- and services-producing activities of private households for own use

U) Activities of extra-territorial organizations and bodies

7.3.4. Holding companies

376. The classification of holding companies merits additional clarification. ISIC4 provides the ability to distinguish between two types of holding activities: financial and management activities:[46]

a) *Holding companies engaged in financial services (activities of holding companies – 6420)*: units that hold the assets (owning controlling-levels of equity) of a group of subsidiary corporations and whose principal activity is ownership of the group. The holding companies in this category do not provide any other service to the business in which the equity is held.

b) *Holding companies engaged in management* (*activities of head offices 7010)*: this category includes the overseeing and managing of other units of the enterprise; undertaking the strategic or organisational planning and decision making role of the enterprise. These units exercise operational control and manage the day-to-day operations of their related units. More precisely, they include:

- head offices,
- centralised administrative offices,
- corporate offices,
- district and regional offices,
- subsidiary management offices.

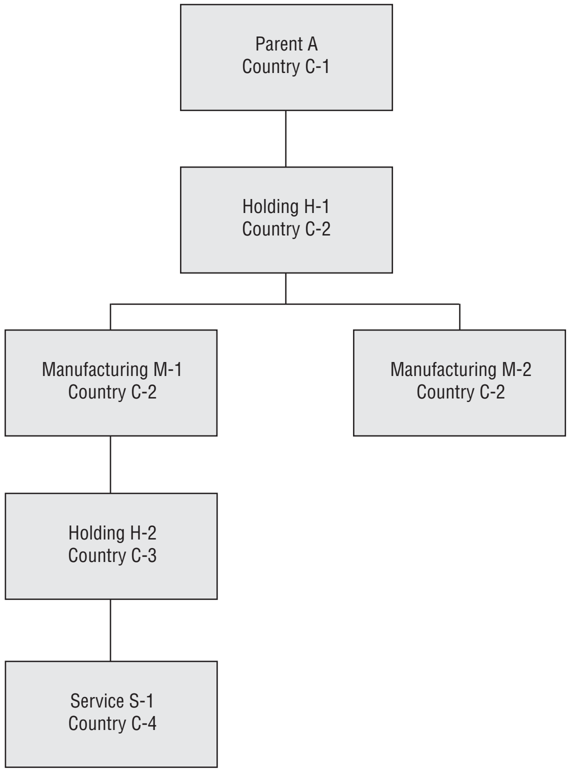
377. If a holding company has subsidiary operations in the local economy as well as abroad, the approach to classifying the holding company should be based on the predominant activity of the local enterprise group.

378. To demonstrate this approach consider that direct investor (A – the parent company) is located in country C1 and establishes a holding company H-1 in country C2.

Case 1: Holding Company H-1 has two manufacturing subsidiaries, company M-1 and company M-2, both in country C-2. In turn, company M-1 has a holding-subsidiary H-2 in country C-3. *The industry classification of H-1 should be manufacturing* (Figure 7.2).

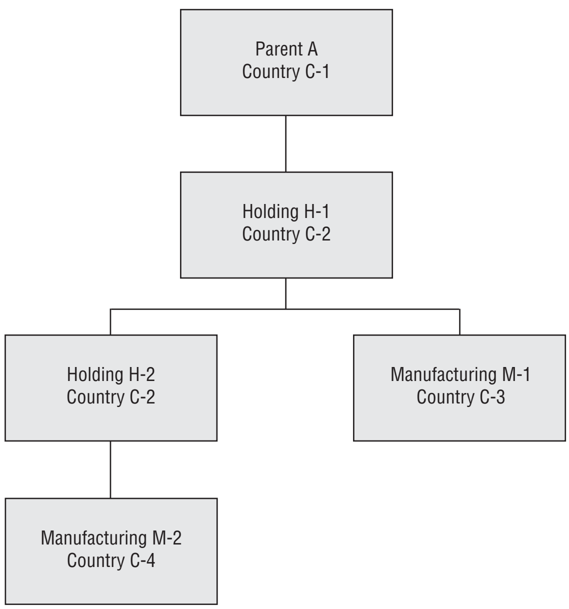
46. The ISIC definition of holding companies, applied within the industry classification of FDI statistics is different from the definition in the SNA, used for institutional sector classification.

Figure 7.2. **Industry classification of holding companies (1)**



Case 2: Holding Company H1 has two subsidiaries of which one is a resident holding company H-2 in country C-2 and a non-resident manufacturing subsidiary M-1 in country C-3. Holding subsidiary H-2 in turn has a non-resident manufacturing subsidiary in country C-4. *The industry classification of H-1 should be holding activities* (Figure 7.3).

Figure 7.3. **Industry classification of holding companies (2)**



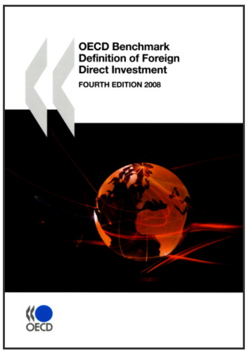
7.4. Country attribution linked with industry classification

379. Many countries may wish to provide more detailed statistics classifying transactions /positions, not just on the industry classification for their total investments described above, but also to go one step further and cross-classify them by industry and by major partner countries. In doing so, compilers provide valuable information for structural analysis of FDI. Nevertheless, they may face limitations due to confidentiality obligations which may prevent them from disseminating details. In such cases, the classification could be based on more aggregate industry classification according to Top-top aggregation, a standard also recognised by the SNA.

Top-top aggregation of ISIC:

A	–	Agriculture, forestry and fishing .
B, C, D and E	–	Manufacturing, mining and quarrying, and other industry. *Of which:* manufacturing.
F	–	Construction.
G, H and I	–	Wholesale and retail trades, transport, accommodation, and food services activities.
J	–	Information and communication.
K	–	Financial and insurance activities.
L	–	Real estate activities.
M, N	–	Business services.
O, P and Q	–	Public administration, defence, education, human health and social work activities.
R, S, T and U		Other services.

OECD BENCHMARK DEFINITION OF FOREIGN DIRECT INVESTMENT: FOURTH EDITION – ISBN 978-92-64-04573-6 – © OECD 2008



From:

OECD Benchmark Definition of Foreign Direct Investment 2008

Fourth Edition

Access the complete publication at:

https://doi.org/10.1787/9789264045743-en

Please cite this chapter as:

OECD (2009), "Classification of FDI by Economy and Industry", in *OECD Benchmark Definition of Foreign Direct Investment 2008: Fourth Edition*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/9789264045743-9-en

OECD