

Explanatory notes

What is foreign direct investment?

Foreign direct investment (FDI) is a category of cross-border equity investment in which the aim of the direct investor is to exert considerable influence on or control over the management of the direct investment enterprise. Cross-border holdings of the capital and reserves of enterprises, branches and permanent establishments are regarded as FDI where at least 10% of the shares or voting rights are directly attributable to the investor, or, taken together, more than 50% of the capital shares or voting rights are directly and indirectly attributable to the investor. With respect to FDI in the reporting country, a direct investment relationship also exists if a group of related enterprises have a joint holding of 10% or more in an enterprise in the reporting country. When it comes to longer chains of ownership, determining whether a direct investment relationship exists depends on the method used. According to the direct influence/indirect control method (DIIC),¹ all enterprises in a continuous chain of majority ownership ("dependent enterprises"), all enterprises in which an investor directly owns 10% or more of the shares or voting power, and all enterprises that are controlled by them (more than 50% of the shares or voting power) represent a direct investment relationship. The German FDI statistics are based on the DIIC with the exception of the lattermost type of majority ownership, which is not included in the German definition.

The German FDI statistics generally observe the concepts and requirements set down in the sixth edition of the International Monetary Fund's (IMF) Balance of Payments and International Investment Position Manual, Sixth Edition, 2009 (BPM6) and the OECD's Benchmark Definition of Foreign Direct Investment, Fourth Edition, 2008. For the EU Member States, the statistical reporting requirements based on these are laid down in a regulation adopted by the European Commission (Regulation (EC) No 184/2005 of 12 January 2005). Moreover, a European Central Bank (ECB) guideline specifies the reporting requirements of the national central banks of the Eurosystem (Guideline (ECB) No 23/2011 of 9 December 2011).

The Bundesbank publishes a range of FDI statistics in order to meet users' various analytical needs and respective international organisations' reporting requirements. A distinction should be made here between stock and transaction statistics, which provide data at a given point in

time and over a given period, respectively. These results can still be presented in accordance with the asset/liability (A/L) principle or the extended directional principle (xDP). In more in-depth analyses, a distinction is also made between immediate and ultimate FDI. The next section provides more detail about the subsets of statistics available and the concepts they are based on. The final section of the methodological notes includes a summary table listing the data provided by individual FDI statistics, specifying the available breakdowns of each (granularity).

Stocks and transactions

The stock statistics for German FDI include the FDI stock statistics and FDI in the international investment position (i.i.p.).

The FDI stock statistics are based on reports by domestic enterprises and individuals on "residents' assets abroad" and "non-residents' assets in the reporting country", which have to be submitted to the Bundesbank once a year.

Owing to a national reporting threshold, reports only need to be submitted for direct investment enterprises with total assets of (the equivalent of) €3 million or more. Indirect holdings must be reported if capital shares or voting rights are majority-owned. For German publications, FDI stocks are calculated from the (share of) equity (nominal capital, capital and revenue reserves, retained earnings/accumulated losses brought forward and annual result) and the credit relationships between German investors and affiliated enterprises. As far as credit relationships are concerned, loans between financial intermediaries (banks and financing institutions) do not count as FDI.

The i.i.p.² records FDI stocks, amongst other things, on a quarterly basis; these are based on various sources of primary statistical data. The main source for equity capital is the annual FDI stock statistics. However, data on the intra-year quarters must be supplemented by extrapolating transactions from the balance of payments. The same

¹ An overview of the internationally recognised methods can be found in the Annex to the Organisation for Economic Co-operation and Development's (OECD) Benchmark Definition of Foreign Direct Investment, Fourth Edition 2008 (Annex 4, pp. 164 ff.).

² The i.i.p. captures Germany's total stock of assets and liabilities vis-à-vis non-residents. Alongside FDI, the i.i.p. also includes portfolio investment, other investment and the reserve assets.

applies to the current quarters of the i.i.p, for which no FDI stock statistics are yet available. Since the results of the FDI stock statistics are compiled from balance sheets, the data are available only with a lag of 16 months after year-end. Therefore, the i.i.p. data at the current end are estimated using transaction reports from the balance of payments and are subsequently revised using the collected stock data.

Moreover, data on cross-border real estate as well as construction work for construction sites existing for more than one year are added from the balance of payments. As described above, equity capital is calculated at book value from the balance sheets of the investment enterprises. Shareholdings in direct investment enterprises listed on stock exchanges, by contrast, are recorded at the listed price.

All direct investment loans in the i.i.p., i.e. long and short-term intra-group loans and trade credits, are based on the monthly stock statistics on the external position of non-banks.

FDI transactions are recorded in the balance of payments³. The purpose of the balance of payments is to provide a systematic breakdown of all economic transactions between residents (natural and legal persons resident in Germany) and non-residents (natural and legal persons resident abroad) within a given period (month, quarter, year). The balance of payments is broken down into the following sub-accounts based on the economic character of the various transactions: current account, capital account and financial account.

As a way to better understand external sector activities, the changes in stocks between i.i.p. quarters are subdivided in a table into transaction-related and valuation-related changes as well as other changes. Transaction-related changes correspond to the financial account. Like the i.i.p, this comprises the functional categories FDI, portfolio investment and other investment (associated investment income, including income from FDI, is captured by the current account under primary income).

The flow accounts used for the balance of payments consist of reported transactions as well as derivative transactions. The threshold set for the primary statistical reporting requirement of the balance of payments (reported transactions) is €12,500 (per month, per country and per transaction category). This threshold has virtually no relevance for FDI, which is why it may be assumed that more or less all transactions are reported. This threshold value applies to

FDI reported as real transactions. All equity capital transactions and long-term loans come under this definition.

Long-term trade credits as well as short-term loans and trade credits are derived from the monthly stock statistics on the external position of non-banks, from which data on reinvested earnings are also derived. Reinvested earnings comprise the part of the annual result which stems from the ordinary operations of the investment enterprise and which exceeds the (share of) distributions paid. Thus, methodologically speaking, reinvested earnings represent an implied reinvestment of financial resources. They are determined on the basis of the FDI stock statistics and allocated to the year in which the earnings were realised.

Presentation methods for FDI statistics: asset/liability principle and extended directional principle

Two ways of presenting foreign direct investment (FDI) have become established internationally; they are most frequently referred to as the asset/liability principle and the extended directional principle. In German FDI statistics, the two presentation forms differ only in terms of debt instruments, i.e. the credit transactions between affiliated enterprises. The presentation of equity (irrespective of whether transactions or stocks are concerned), is identical for both presentation principles.⁴ The extended directional principle focuses on the direction of the original FDI. Capital flows from the direct investor to the direct investment enterprise are considered the “normal” direction, while investments in the opposite direction are termed “reverse investments”. For this reason, loans from the investment enterprise to the investor are deducted from the loans from investors to the investment enterprises. The way in which loans between fellow enterprises are recorded in the statistics depends on the domicile of the group’s headquarters. If the group’s headquarters are domiciled in Germany, all debt positions

³ The balance of payments of the Federal Republic of Germany provides a systematic breakdown of all economic transactions between residents and non-residents within a given period. It constitutes an important part of the consolidated balance of payments of the euro area and the European Union. At national and international level, the balance of payments provides the authorities responsible for monetary and economic policy, associations and enterprises as well as researchers with important information on the external trade links of the economic territory under analysis.

⁴ In contrast to debt instruments, for equity it is assumed that a direct investment enterprise does not have an equity stake in the direct investor. Because of this assumption, both presentation methods lead to the same result.

between resident and non-resident fellow enterprises are recorded as German outward FDI. For group headquarters domiciled abroad, debt positions are recorded as inward FDI in Germany.

Following the changeover to the requirements set out in the sixth edition of the IMF's Balance of Payments and International Investment Position Manual, 2009 (BPM6) in 2014, intra-group loans are also presented in accordance with the asset/liability principle. Both the credit claims of German shareholders on their foreign affiliated enterprises as well as loans from German direct investment enterprises to their foreign investors are shown under claims on affiliated enterprises abroad. Conversely, loans from foreign shareholders to German investment enterprises and loans from foreign direct investment enterprises to their German shareholders are categorised as liabilities to foreign affiliated companies.

Analytical differences regarding country allocation: immediate FDI and ultimate concepts

Direct investment relationships frequently have longer chains of ownership across multiple countries. The standard international format for presenting FDI is by immediate country of the direct investor (for FDI in the reporting country) or the direct investment enterprise (for domestic FDI abroad). One alternative of additional analytical benefit is presentation using ultimate concepts. Applying this method, regional presentation is expanded either "upwards" or "downwards" along the chain of ownership for both FDI in the reporting country and domestic FDI abroad. With respect to FDI in the reporting country, investments are presented according to the country of the uppermost direct investor or the group headquarters (ultimate investing country, or UIC).

Domestic FDI abroad can be presented according to the country of the final investment object (ultimate host country, or UHC). In this context, immediate FDI held indirectly via dependent holding companies domiciled abroad is shown in a consolidated form. This is done by exchanging the immediate investments in dependent holding companies for investments of these holding companies in other dependent companies. Consolidation thus makes it possible to "look through" the dependent holding companies and thereby identify the region or sector where the actual investment object is located without counting the employed capital multiple times.

One other method of presentation, which, strictly speaking, does not belong to the ultimate concepts since it does not involve presentation by country but nevertheless by final investment object, is presentation according to the economic sector of the final investment object.

This particular manner of presenting FDI in the reporting country involves the consolidated recording of immediate and indirect FDI. In doing so, investments in directly held, dependent holding companies in Germany are exchanged for investments indirectly held via these dependent holding companies. This manner of presentation also allows the actual investment object in Germany to be identified without capital being recorded twice.

Overview of data provided by different sets of FDI statistics:

Overview of data provided by different sets of FDI statistics

Position	FDI stock statistics	International investment position	Balance of payments		
	Frequency				
	Annually	Quarterly	Monthly	Quarterly	Annually
Presentation principle:					
xDP	x	x	–	x	x
A/L	–	x	x	–	–
Breakdown:					
Countries	x	x	x	x	x
Sectors	–	x	x	x	x
Countries x sectors	–	x	x	x	x
Economic sectors	x	–	x	x	x
Countries x economic sectors	x	–	x	x	x
Country allocation:					
Immediate	x	x	x	x	x
Ultimate	x	–	–	–	–

■ List of countries ⁵

I. Europe

1. EU member states (27)

1.1 Euro area (20)

Austria
Belgium
Croatia
Cyprus
Estonia
Finland
France
Greece
Ireland
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Portugal
Slovakia
Slovenia
Spain

European Central Bank (ECB)
European Financial Stability Facility (EFSF)
European Stability Mechanism (ESM)

1.2 Other EU member states

Bulgaria
Czechia
Denmark
Hungary
Poland
Romania
Sweden
European institutions (excl. ECB, ESM and EFSF)

2. Other european countries

2.1 European Free Trade Association (EFTA)

Iceland
Liechtenstein
Norway
Switzerland

2.2. Other European countries (excl. EFTA)

Albania
Andorra

Belarus
Bosnia and Herzegovina
Faroe Islands
Gibraltar
Guernsey
Holy See (Vatikan)
Isle of Man
Jersey
Kosovo
Moldova
Montenegro
North Macedonia
Russian Federation
San Marino
Serbia
Turkey
Ukraine
United Kingdom

II. Africa

1. North Africa

Algeria
Egypt
Libya
Morocco
Tunisia

2. Other African countries

Angola
Benin
Botswana
British Indian Ocean Territory
Burkina Faso
Burundi
Cabo Verde
Cameroon
Central African Republic
Chad
Comoros
Congo (Democratic Republic of)
Congo (Republic of)

⁵ In general, the group of countries specified in the table are based on the addition of individual listed countries. However, the balance of payments include also transactions whose assignment to an individual country is not possible. In this case, we use the category "not allocated countries" according to the nearest group possible of such a country. Because of the combination of both geographical and economic features, the "not allocated countries" are not listed here.

Côte d'Ivoire
Djibouti
Equatorial Guinea
Eritrea
Eswatini
Ethiopia
Gabon
Gambia
Ghana
Guinea
Guinea-Bissau
Kenya
Lesotho
Liberia
Madagascar
Malawi
Mali
Mauretania
Mauritius
Mozambique
Namibia
Niger
Nigeria
Rwanda
Saint Helena, Ascension and Tristan da Cunha
Sao Tome and Principe
Senegal
Seychelles
Sierra Leone
Somalia
South Africa
South Sudan
Sudan
Tanzania
Togo
Uganda
Zambia
Zimbabwe

III. America

1. North America

Canada
Greenland
United States

2. Central America

Anguilla
Antigua and Barbuda
Aruba
Bahamas
Barbados
Belize

Bermuda
Bonaire, Saba and Saint Eustatius
British Virgin Islands
Cayman Islands
Costa Rica
Cuba
Curaçao
Dominica
Dominican Republic
El Salvador
Grenada
Guatemala
Haiti
Honduras
Jamaica
Mexico
Montserrat
Nicaragua
Panama
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the Grenadines
Sint Maarten (Dutch part)
Trinidad and Tobago
Turks and Caicos Islands
Virgin Islands of the United States

3. South America

Argentina
Bolivia
Brazil
Chile
Colombia
Ecuador
Falkland Islands (Islas Malvinas)
Guyana
Paraguay
Peru
Suriname
Uruguay
Venezuela

IV. Asia

1. Near and Middle East countries

1.1 Gulf Arabian countries

Bahrain
Iraq
Kuwait
Oman
Qatar
Saudi Arabia

United Arab Emirates
Yemen

1.2 Other Near and Middle East countries

Armenia
Azerbaijan
Georgia
Israel
Jordan
Lebanon
Palestinian territories
Syria

2. Other Asian countries

Afghanistan
Bangladesh
Bhutan
Brunei Darussalam
Cambodia
China
Hong Kong
India
Indonesia
Iran
Japan
Kazakhstan
Korea (Democratic People's Republic of)
Korea (Republic of)
Kyrgyzstan
Lao
Macao
Malaysia
Maldives
Mongolia
Myanmar
Nepal
Pakistan
Philippines
Singapore
Sri Lanka
Taiwan
Tajikistan
Thailand
Timor-Leste
Turkmenistan
Uzbekistan
Viet Nam

V. Australia, Oceania and Polar Regions

American Samoa
Antarctica
Australia
Bouvet Island

Christmas Island
Cocos Islands
Cook Islands
Fiji
French Polynesia
French Southern and Antarctic Territories
Guam
Heard and the McDonald Islands
Kiribati
Marshall Islands
Micronesia
Nauru
New Caledonia
New Zealand
Niue
Norfolk Island
Northern Mariana Islands
Palau
Papua New Guinea
Pitcairn Islands Group
Solomon Islands
Samoa
South Georgia and the South Sandwich Islands
Tokelau
Tonga
Tuvalu
United States Minor Outlying Islands
Vanuatu
Wallis and Futuna (Islands)

VI. International Organisations

(excl. EU Organisations)

Supplementary data

OECD countries

Australia
Austria
Belgium
Canada
Chile
Colombia
Costa Rica
Czechia
Denmark
Estonia
Finland
France
Greece
Hungary
Iceland
Ireland
Israel

Italy
Japan
Korea (Republic of)
Latvia
Lithuania
Luxembourg
Mexico
Netherlands
New Zealand
Norway
Poland
Portugal
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom
United States

Offshore financial centers

Andorra
Anguilla
Antigua and Barbuda
Aruba
Bahamas
Bahrain
Barbados
Belize
Bermuda
British Virgin Islands
Cayman Islands
Cook Islands
Curaçao
Dominica
Gibraltar
Grenada
Guernsey
Hong Kong
Isle of Man
Jersey
Lebanon
Liberia
Liechtenstein
Marshall Islands
Mauritius
Montserrat
Nauru
Niue
Panama
Philippines
Saint Kitts and Nevis

Saint Lucia
Saint Vincent and the Grenadines
Samoa
Seychelles
Singapore
Sint Maarten
Turks and Caicos Islands
Vanuatu
Virgin Islands of the United States

OPEC countries

Algeria
Angola
Congo (Republic of)
Equatorial Guinea
Gabon
Iran
Iraq
Kuwait
Libya
Nigeria
Saudi Arabia
United Arab Emirates
Venezuela

■ List of economic activities following NACE Rev. 2

All economic activities

A) Agriculture, forestry and fishing

0100 Crop and animal production, hunting and related service activities

0200 Forestry and logging

0300 Fishing and aquaculture

B) Mining and carrying

0500 Mining of coal and lignite

0600 Extraction of crude petroleum and natural gas

0700 Mining of metal ores

0800 Other mining and quarrying

0900 Mining support service activities

C) Manufacturing

C120 Manufacture of food products, beverages and tobacco products

1000 Manufacture of food products

1100 Manufacture of beverages

1200 Manufacture of tobacco products

C140 Manufacture of textiles and wearing apparel

1300 Manufacture of textiles

1400 Manufacture of wearing apparel

1500 Manufacture of leather and related products

C180 Manufacture of wood and paper products; printing and reproduction of recorded media

1600 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials

1700 Manufacture of paper and paper products

1800 Printing and reproduction of recorded media

1900 Manufacture of coke and refined petroleum products

2000 Manufacture of chemicals and chemical products

2100 Manufacture of basic pharmaceutical products and pharmaceutical preparations

2200 Manufacture of rubber and plastic products

2300 Manufacture of other non-metallic mineral products

C250 Manufacture of basic metals and fabricated metal products, except machinery and equipment

2400 Manufacture of basic metals

2500 Manufacture of fabricated metal products, except machinery and equipment

2600 Manufacture of computer, electronic and optical products

2610 Manufacture of electronic components and boards

2620 Manufacture of computers and peripheral equipment

C264 Manufacture of communication equipment; manufacture of consumer electronics

2630 Manufacture of communication equipment

2640 Manufacture of consumer electronics

C266 Manufacture of instruments and appliances for measuring, testing and navigation; watches and clocks; irradiation, electromedical and electrotherapeutic equipment

2650 Manufacture of instruments and appliances for measuring, testing and navigation; watches and clocks

2660 Manufacture of irradiation, electromedical and electrotherapeutic equipment

C268 Manufacture of optical instruments and photographic equipment; manufacture of magnetic and optical media

2670 Manufacture of optical instruments and photographic equipment

2680 Manufacture of magnetic and optical media

- 2700 Manufacture of electrical equipment
- 2800 Manufacture of machinery and equipment n.e.c.
- C300 Manufacture of motor vehicles and other transport equipment
 - 2900 Manufacture of motor vehicles, trailers and semi-trailers
 - 3000 Manufacture of other transport equipment
- 3100 Manufacture of furniture
- C330 Other manufacturing; repair and installation of machinery and equipment
 - 3200 Other manufacturing
 - 3300 Repair and installation of machinery and equipment

D) Electricity, gas, steam and air conditioning supply

- 3500 Electricity, gas, steam and air conditioning supply

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

- 3600 Water collection, treatment and supply
- 3700 Sewerage
- 3800 Waste collection, treatment and disposal activities; materials recovery
- 3900 Remediation activities and other waste management services

F) Construction

- 4100 Construction of buildings
- 4200 Civil engineering
- 4300 Specialised construction activities

G) Wholesale and retail trade; repair of motor vehicles and motorcycles

- 4500 Wholesale and retail trade and repair of motor vehicles and motorcycles
- 4600 Wholesale trade, except of motor vehicles and motorcycles
- 4700 Retail trade, except of motor vehicles and motorcycles

H) Transportation and storage

- 4900 Land transport and transport via pipelines
- 5000 Water transport
- 5100 Air transport
- 5200 Warehousing and support activities for transportation
- 5300 Postal and courier activities

I) Accommodation and food service activities

- 5500 Accommodation
- 5600 Food and beverage service activities

J) Information and Communication

- J600 Motion picture, video and television programme production, sound recording and music publishing, programming and broadcasting activities
 - 5900 Motion picture, video and television programme production, sound recording and music publishing activities
 - 6000 Programming and broadcasting activities
- 6100 Telecommunications
- J630 Publishing activities, computer programming, consultancy and related activities; information service activities
 - 5800 Publishing activities
 - 6200 Computer programming, consultancy and related activities
 - 6300 Information service activities

K) Financial and insurance activities

- 6400 Financial service activities, except insurance and pension funding

- 6410 Monetary intermediation
 - 6411 Central banking (Deutsche Bundesbank)
 - 6419 Other monetary intermediation
- 6420 Activities of holding companies
- K649 Trusts, funds and similar financial entities; other financial service activities
 - 6430 Trusts, funds and similar financial entities
 - 6490 Other financial service activities, except insurance and pension funding
- 6500 Insurance, reinsurance and pension funding, except compulsory social security
 - K652 Insurance and reinsurance
 - 6510 Insurance
 - 6520 Reinsurance
 - 6530 Pension funding
- 6600 Activities auxiliary to financial services and insurance activities

L) Real estate activities

- 6800 Real estate activities

M) Professional, scientific and technical activities

- 7000 Activities of head offices; management consultancy activities
 - 7010 Activities of head offices
 - 7020 Management consultancy activities
- M750 Other professional, scientific and technical activities
 - 6900 Legal and accounting activities
 - 7100 Architectural and engineering activities; technical testing and analysis
 - 7110 Architectural and engineering activities and related technical consultancy
 - 7120 Technical testing and analysis
 - 7200 Scientific research and development
 - 7300 Advertising and market research
 - 7400 Other professional, scientific and technical activities
 - 7500 Veterinary activities

N) Administrative and support service activities

- 7700 Rental and leasing activities
- 7800 Employment activities
- 7900 Travel agency, tour operator reservation service and related activities
- 8000 Security and investigation activities
- 8100 Services to buildings and landscape activities
- 8200 Office administrative, office support and other business support activities

O) Public administration and defence; compulsory social security

- 8400 Public administration and defence; compulsory social security

P) Education

- 8500 Education

Q) Human health and social work activities

- 8600 Human health activities
- 8700 Residential care activities
- 8800 Social work activities without accommodation

R) Arts, entertainment and recreation

- 9000 Creative, arts and entertainment activities
- 9100 Libraries, archives, museums and other cultural activities

9200 Gambling and betting activities

9300 Sports activities and amusement and recreation activities

S) Other service activities

9400 Activities of membership organisations

9500 Repair of computers and personal and household goods

9600 Other personal service activities

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

9700 Activities of households as employers of domestic personnel

9800 Undifferentiated goods-and services-producing activities of private households for own use

U) Activities of extraterritorial organisations and bodies

9900 Activities of extraterritorial organisations and bodies