

wiiw FDI Database – detailed description

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The wiiw FDI Database provides an up-to-date presentation of Foreign Direct Investment (FDI) flow and stock data. As a backbone for its own research, wiiw maintains and regularly updates its wiiw FDI Database. The data allow to generate industry- and country-specific FDI profiles. The main characteristics are described here.

Countries covered

The **wiiw FDI Database** currently covers the following 23 Central, East and Southeast European countries.

Albania	Estonia	Moldova	Serbia *)
Belarus	Hungary	Montenegro	Slovakia
Bosnia and Herzegovina	Latvia	North Macedonia	Slovenia
Bulgaria	Lithuania	Poland	Turkey
Croatia	Kazakhstan	Romania	Ukraine
Czechia	Kosovo	Russia	

*) Data referring to Serbia exclude Kosovo and Metohija.

This unique country mix covers, apart from the new EU Member States and Southeast European countries, also selected major countries of the CIS.

Time series usually start in 1990 as far as data are available, for the newly independent countries time series start in 2000.

Updates

Two major updates are done twice a year in spring and autumn as soon as the official statistics become available.

Coverage of indicators

The **wiiw FDI Database** comprises more than 18,900 annual time series on the following FDI indicators:

FDI total, EUR million
FDI by components, EUR million
FDI by partner, EUR million, share in % of total
FDI by activities, EUR million, share in % of total
Time series are available for FDI inflow / outflow, FDI inward / outward stock.
Additionally, we provide for analytical purpose:
- FDI flow and stock per capita
- FDI flow and stock in % of GDP
- FDI flow in % of Gross fixed capital formation

One of the major assets of this database is the careful **description of methodological breaks in footnotes and chain linking of breaks in time series** (e.g. introduction of BPM6 and its differently

applied reporting concept). The comparability of time series over time and with international methodologies is ensured, possible deviations are again defined in footnotes of the respective main series. Permanent quality controls and consistency checks are the key to sound FDI analyses.

FDI total:

These time series show the main information on FDI starting from 1990 onwards – inflows, outflows, inward stocks and outward stocks. All time series are presented **excluding Special Purpose Entities (SPEs)**. Deviations from the standard definition (BPM6, BDM4 – for more details see below) and breaks within time periods are described in footnotes.

FDI by components:

FDI flows (in or out) comprise three components (described by BPM6 definition):

- Equity other than reinvestment of earnings
- Reinvestment of earnings
- Debt instruments

For the FDI stock (in or out) the first 2 components are not given separately, they are summarised in the term 'equity'.

FDI by partner:

The wiiw FDI Database relies on the statistics of the central banks of the FDI host countries. The host country is the target country of investment. The home country is the investor's immediate country of origin. In the wiiw FDI Database we do not distinguish between home and host country, the general term *FDI by partner* is used. Depending on the direction chosen (in or out) this means:

- FDI inflow or inward stock: the FDI partner is the home country (investor's immediate country of origin)
- FDI outflow or outward stock: the FDI partner is the host country (target country of investment)

FDI by activities:

The activity breakdown for FDI flows and stocks is given according to the EU-wide applied **NACE classification** (Statistical Classification of Economic Activities in the European Community; details are available at Eurostat). **NACE Rev. 2** is the most recent one, introduced in 2008 in response to the technological developments and structural changes of the economy. Time series according to NACE Rev. 2 usually start in mid-2000 (depending on the country). **NACE Rev. 1**, the previous classification, is available mostly back to the mid-1990s. Both revisions are available at 1- and 2-letter code and 2-digit manufacturing industry code. For Romania and Russia the less detailed industry breakdown previously used in the former COMECON is given – in this database called **other classification**.

Remark:

The more detailed activity breakdown by NACE Rev. 2 may cause loss of information: some industries for which data were available under NACE Rev. 1 are confidential under the more detailed NACE Rev. 2 and are summed up in 'other not elsewhere classified industries'.

Sources used

Time series are reported by the respective central banks of the individual countries in the Direct Investment statistics. For those countries reporting according to the asset/liability principle, the Balance of Payments (flow) and International Investment statistics (stock) are still the main source.

In the absence of central bank data, we rely on '**registration data**' obtained from the statistical offices. This was done in the case of Romania until 2006 and in the case of Russia until 2013. These data are stored in separate time series with a footnote reading 'registration data'.

Revisions of data

Annual surveys of direct investment enterprises provide the final data for flows and stocks. Revisions of data are published for the previous 2–3 years before they become final. The wiiw FDI Database includes all published revisions.

Currency/units

All time series are given in millions of euro, whatever the currency used by the source. Unless published by the source, we convert flow data by the annual average exchange rate and stock data by the end-of-year exchange rate. Additionally, the database offers shares by partner and by activities supporting a quick analysis by users.

Abbreviations used

Conventional signs and abbreviations:

.	not available
EUR m	euro million (10 ⁶)

Other abbreviations:

BOP	Balance of Payments
BPM5	Balance of Payments Manual Fifth Edition
BPM6	Balance of Payments and International Investment Position Manual Sixth Edition
BMD4	OECD Benchmark Definition of Foreign Direct Investment, Fourth Edition (2008)
EU	European Union
EU15_1995	EU – 15 countries (1995-2004)
EU27_2020	EU – 27 countries (from 2020)
EU28_2013	EU – 28 countries (2013-2020)
GDP	Gross domestic product
GFCF	Gross fixed capital formation
IIP	International Investment Position
SPE	Special Purpose Entities

Related publications

Starting from 2021, instead of our earlier series of [wiiw FDI Report](#) an analysis of the most recent FDI trends is available in the [wiiw Monthly Reports](#) in the Spring and Autumn.

The *wiiw FDI Database* will be steadily improved and enlarged by indicators or countries. wiiw welcomes any comments or suggestions aimed at improving its quality and user-friendliness.

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Background information on FDI methodology

Concept and coverage

based on <http://www.imf.org/external/pubs/ft/bop/2007/bopman6.htm>

BPM6 updates the fifth edition of the Balance of Payments Manual (BPM5) from IMF. Also the corresponding “OECD Benchmark Definition of Foreign Direct Investment, 4th edition 2008” (BMD4) replaces the 3rd edition. In the Balance of Payments (BPM6), direct investment is presented on an assets and liabilities (A/L) basis, instead of the directional principle (DP) used in BPM5. This increases both the net acquisition of financial assets and the net incurrence of liabilities. Netting out assets and liabilities results in the same amount as netting inflows and outflows in the (new) directional principle (FDI net is the same).

In this database the directional principle under BPM6 is the used and preferred principle.

The concepts of direct investor and direct investment enterprise remain broadly unchanged compared with BPM5. Under ‘Direct investor in direct investment enterprises’, the reporting economy of the direct investor records the assets of the direct investor. The reporting economy of the direct investment enterprises records the (mirror) liabilities of the direct investment enterprises.

In the **standard components**, direct investment is classified according to the relationship between the investor and the entity receiving the investment as equity, reinvestment of earnings and debt instruments. The *wiiw FDI Database* provide these data for the countries covered.

In BPM6 the separate category of ‘Investment in fellow enterprises’ is included. Fellow enterprises are those entities under the control or influence of the same immediate or indirect investor, but which do not control or influence each other (i.e. they are not themselves in a direct investment relationship). Financing between fellow enterprises is reclassified in BPM6 from other investment to direct investment. The *wiiw FDI Database* do not separate out data on fellow enterprises.

The concept of pass-through funds is introduced. Data compilers in economies that have large values of pass-through funds are encouraged to consider the compilation of supplementary data on funds in transit, based on national definitions. The *wiiw FDI Database* do not provide data pass-through funds because CESEE central banks either do not report it or the reported values are very small (with the exception of Hungary).

BPM6 prescribes market prices for the valuation of international accounts. However, market prices are not readily available for many assets/liabilities including for unlisted and other equity. For EU member states the application of the “Own Funds at Book Value” derived from the balance sheet of the direct investment enterprise is recommended by Eurostat in case a market price (listing on a stock exchange) is not available. The *wiiw FDI Database* comply with Eurostat standards.

Changes in FDI stocks (positions) other than those due to transactions (flows), occur due to exchange rate movements, as well as other price changes resulting from holding gains or losses and other changes e.g. reclassifications from portfolio investment to direct investment.

Directional principle – the main presentation form to support FDI analysis

based on <http://www.oenb.at/en/Statistics/Reporting/New-Balance-of-Payments-Manual-in-2014.html>

The directional principle, in which outward direct investments of the reporting country abroad and inward direct investments of non-residents in the reporting country are recorded on a net basis, serves for more detailed analyses by the main international institutions publishing data on FDI (Eurostat, OECD, UNCTAD). In the new ‘extended’ directional principle, loans between fellow enterprises are treated according to the location of the headquarters (residents vs. non-residents). Net basis means gross investment minus disinvestment; as a consequence, both FDI inflows and outflows can take a negative sign.

The main difference between the two presentational styles (A/L and DP) stems from the treatment of ‘reverse investments’, i.e. receivables of a foreign subsidiary vis-à-vis the parent (in the reporting country). According to the assets/liabilities concept, these receivables are added to the payables of the reporting country (FDI outflows), whereas according to the directional principle, they are subtracted from active direct investments (reduces the FDI inflow). In case reverse investments are higher than the assets/liabilities, negative FDI flow and stock figures may appear.

The reporting principle in the wiiw FDI Database is to cover FDI by the **directional principle**, based on the IMF’s Balance of Payments and International Investment Position Manual (BPM6); the assets/liability principle is used only if data based on the directional principle are unavailable

In order to enhance the analytical value of FDI data, **Special Purpose Entities (SPEs)**, i.e. entities owned by foreigners without economic activity, most of whose assets consist of foreign equity holdings, have to be recorded separately. Two countries in the *wiiw FDI Database* publish flow and stock data excluding SPEs, namely Hungary and Poland (for Poland all breakdowns by components, activities or countries include SPE until 2013). For Estonia the main FDI total time series exclude SPE from 2013 while SPE is included in all breakdowns. All data available in the *wiiw FDI Database* exclude SPEs.

The box below taken from the IMF’s BPM6¹ summarises the major components of FDI and the difference between the asset/liability and the directional principle. Leaving aside fellow enterprises, the simplified presentation of the components by the two principles looks as follows:

Asset/liability principle

Assets = FDI outward assets + (reverse) assets of inward investment

Liabilities = FDI inward liabilities + (reverse) liabilities of outward investment

Directional principle

FDI outflow = FDI outward assets – (reverse) liabilities of outward investment

FDI inflow = FDI inward liabilities – (reverse) assets of inward investment

¹ <https://www.imf.org/external/pubs/ft/bop/2007/bopman6.htm>, Chapter 6, page 109.

DERIVATION OF DATA UNDER THE DIRECTIONAL PRINCIPLE

The standard components for direct investment positions and transactions are shown in the table below. They may be rearranged to support different kinds of presentation and analysis.

Components of Direct Investment (Asset/Liability Presentation)

Assets	Liabilities
Of direct investors in direct investment enterprises	Of direct investment enterprises to direct investor
A1 Equity	L1 Equity
A2 Debt instruments	L2 Debt instruments
Of direct investment enterprises in direct investor – Reverse investment	Of direct investor to direct investment enterprises – Reverse investment
A3 Equity	L3 Equity
A4 Debt instruments	L4 Debt instruments
Of resident fellow enterprises in fellow enterprises abroad	Of resident fellow enterprises to fellow enterprises abroad
A5 Equity	L5 Equity
A5.1 Equity (if ultimate controlling parent is resident ¹)	L5.1 Equity (if ultimate controlling parent is nonresident ²)
A5.2 Equity (if ultimate controlling parent is nonresident ²)	L5.2 Equity (if ultimate controlling parent is resident ¹)
A6 Debt instruments	L6 Debt instruments
L6.1 Debt instruments (if ultimate controlling parent is resident ¹)	A6.1 Debt instruments (if ultimate controlling parent is nonresident ²)
L6.2 Debt instruments (if ultimate controlling parent is nonresident ²)	A6.2 Debt instruments (if ultimate controlling parent is resident ¹)

¹That is, resident in the compiling economy.

²That is, not resident in the compiling economy.

Asset/liability presentation

Direct investment assets:

Equity: $A1 + A3 + A5$;

Debt instruments: $A2 + A4 + A6$

Direct investment liabilities:

Equity: $L1 + L3 + L5$;

Debt instruments: $L2 + L4 + L6$

Directional principle presentations

In principle:

Direct investment abroad (outward direct investment):

Equity: $A1 - L3 + A5.1 - L5.2$;

Debt instruments: $A2 - L4 + A6.1 - L6.2$

Direct investment in the reporting economy (inward direct investment):

Equity: $L1 - A3 + L5.1 - A5.2$;

Debt instruments: $L2 - A4 + L6.1 - A6.2$

Acceptable practical alternative:

Direct investment abroad:

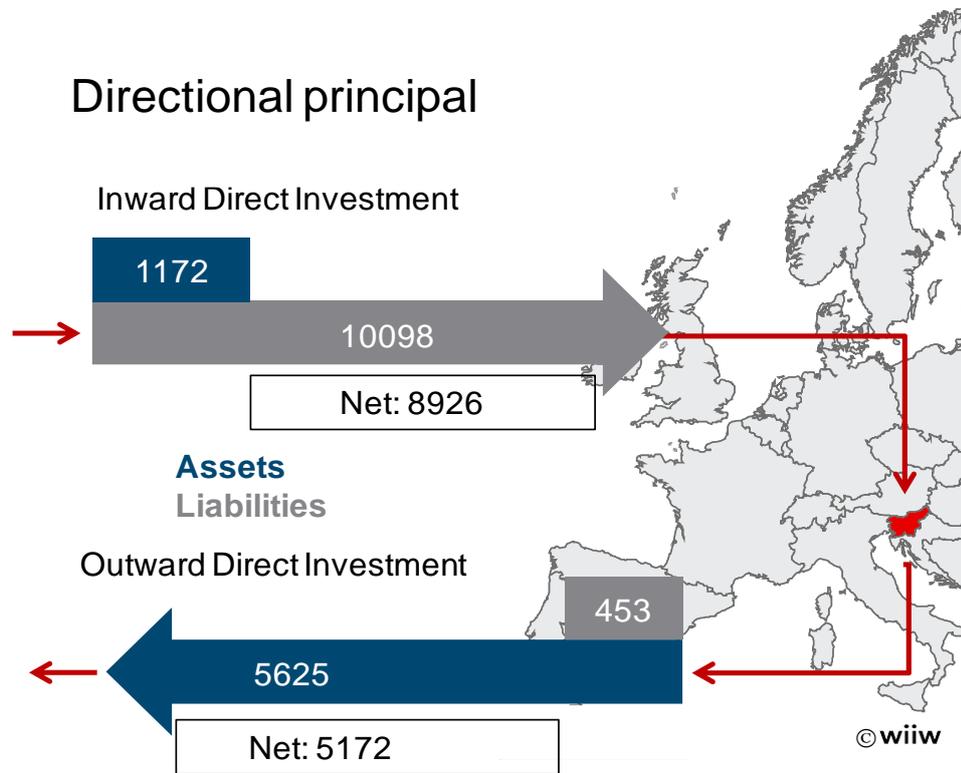
Equity: $A1 - L3 + A5$;

Debt instruments: $A2 - L4 + A6$

Direct investment in the reporting economy:

Equity: $L1 - A3 + L5$;

Debt instruments: $L2 - A4 + L6$



Asset/Liability principal

Assets	6797
Liabilities	10551