METHODOLOGY FOR THE COMPILATION OF THE BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION STATISTICS – BPM6 (from June 2014)

General remarks

In Hungary the central bank is responsible for compiling the balance of payments and the international investment position, i.e. for specifying the amount of and changes in assets and liabilities vis-à-vis non-residents. The compilation of balance of payments statistics has been performed in close cooperation with the Central Statistical Office for over a decade now. These include: goods (from 2003); business services and travel (from 2004); other services (from 2005); compensation of employees and EU and household transfers (from 2008) (see Table 1).

An overall statutory framework for the collection of data required for the statistics is provided in the Central Bank Act (Act LVIII of 2001 on the Magyar Nemzeti Bank) and the Act on Statistics (Act XLVI of 1993). The yearly reporting obligations are set out in the annually updated MNB regulation and in the National Statistical Data Collection Programme (OSAP). The content of the tables in the reports and the detailed methodological instructions for the completion of the relevant forms are available on the MNB website.

The expansion of data requirements arising from the international reporting obligations of the MNB, the increasing complexity of financial relations and changes in the international regulatory environment necessitated methodological alterations in statistical data collection as well. In 2008 the Magyar Nemzeti Bank, in cooperation with the Hungarian Central Statistical Office (HCSO), implemented a new data collection system based on direct reporting for the compilation of balance of payments statistics[1]. Large companies reporting the full set of BOP and IIP statistics on a monthly basis, a sample of SMEs (based on a value limit) reporting on a quarterly or yearly basis, supplementary subject-specific questionnaire surveys and various estimation methods play a central role in the compilation of the statistics.

The introduction of the international methodology in 2014 called for minor changes in data collection, modifications to processing and changes in publications to accommodate the new information needs.

Table 1

Division of labour between the HCSO and the MNB

Balance of payments instruments	Financial and non-financial corporations	Government and MNB	Households
Goods	HCSO		
Services	HCSO		
Compensation of Employees	HCSO		
investment income	MNB		
Other primary income	HCSO		
Secondary income	HCSO/MNB	HCSO	HCSO
Trade in non-produced, non-financial assets	MNB		
Capital transfers	HCSO/MNB		
EU transfers in the total balance of payments	HCSO		
Direct investment — equity	MNB		

[1]the previous system the compilation of the BOP mainly relied on the use of transaction codes for payments based on reports by credit institutions.

Foreign direct investment — debt instruments	MNB
Portfolio investment	MNB
Financial derivatives and employee stock options	MNB
Other investment	MNB
Reserve assets	MNB

When compiling statistics, monthly flow data reported by foreign currency are converted to Forints at the monthly average of MNB's official daily mid exchange rates weighted by working days, and are aggregated at the level of the total economy. The cumulative and quarterly flow data are calculated by summing the individual monthly data. The stock data, also reported by currency, are converted to HUF at the MNB's official daily mid exchange rates at the end of the period and are aggregated. The data published in EUR are converted from the HUF data at the average monthly (for flow statistics) or quarter-end HUF/EUR rates (in the statistics prior to 1999, ECU is equal to EUR).

The published balance of payments statistics distinguish four institutional sectors, in line with the methodology:

- the MNB as a monetary authority,
- other monetary institutions (banks, specialised credit institutions, co-operative credit institutions and money market funds)
- the general government (central government, local governments and social security funds), and
- other sectors (non-financial corporations, other financial intermediaries, auxiliary financial service providers, households and non-profit institutions serving households, private financial intermediaries).

Publications also use this standard sectorisation:

A. Central Bank (S.121)
B. Other monetary institutions (S.12T)
  B.1. Deposit taking corporations except the central bank (S.122)
  B.2. Money market funds (S.123)
C. General government (S.13)
D. Receivables from other sectors (S.1P)
  D.1. Financial corporations other than MFIs (S.12M)
  D.2. Non-financial corporations, households and non-profit institutions serving households (S.1V)

Hungary has compiled the BOP and IIP separately including and excluding special purpose entities (SPEs) since January 2006 in order to eliminate the distortion by SPE data.

Special-purpose entities (SPEs) are subsidiaries forming part of multinational enterprise groups mostly active abroad, with only weak ties to the Hungarian economy. They are mainly involved in the intra-group intermediation of funds, the direction and volume of funds channelled through them regulated by their parent companies. Their investments are not primarily aimed at foreign direct investment in Hungary: their net investment into various financial instruments over longer periods is close to zero. At the same time, they shift relatively large volumes of funds, thus their transactions inflate particularly the gross components of the financial account, thus distorting the statistics reflecting the financial processes playing out in the national economy.

The MNB identifies special purpose entities within resident corporations in conjunction with the HCSO. The indicators reflecting the main characteristics of these firms for creating the register of SPEs are:

- In their balance sheets, the ratio of non-financial assets is negligible as compared to financial assets, with the latter consisting mainly of equity, long-term loans and securities.
- Their turnover derives primarily from export revenue and it does not exceed HUF 500 million annually.

- The number of staff tends to be very low (1-3 persons).
- They typically have high registered capital (capital reserve), which they lend immediately or they purchase equity participations abroad or establish branches abroad.
- They have no subsidiary in Hungary. If, however, the SPE criteria are satisfied both for a resident enterprise and its resident subsidiary, i.e., their operations dominantly relate to the rest of the world, the two enterprises together are considered to be an SPE.
- Their material cost is negligible.
- The name of the enterprise refers to the off-shore nature of the activity.

A new requirements from 2014 under the new international methodology is to present separate data on special purpose entities (within direct investment data).

Since September 2012, capital movements predominantly appearing as direct investments, which do not directly affect the external financing of the national economy, so-called capital in transit, has been presented separately (retrospectively to 2008).

Capital in transit are international enterprise group funds that pass through an economy to an affiliate in another economy, so that the funds do not affect the economy of that enterprise, but do not quality as having special purpose due to their ownership structure. While these enterprises do engage in activity that is relevant to the Hungarian economy, these pass-through funds are not linked to developments or investments in Hungary and go to fund other operations, distorting the statistics on the components of direct investments.[2] Thus their impact on statistical data is very similar to that of SPEs, but occurring among normal, non-SPE enterprises.

Capital in transit include the use of equity capital investment received by a Hungarian enterprise from a non-resident investor to acquire or establish foreign direct investment company, increase capital or lend abroad using such financing received from a non-resident investor. Acquisition of foreign participations from loans received from non-resident investors or other enterprise group members and loans granted to foreign subsidiaries or enterprise group members are also recognised here. Conversion of foreign credits and loans/receivables to capital increase are not regarded as capital in transit, nor is the repayment of foreign credits and loans/receivables from capital increase, the settlement of non-resident accounts receivable and payable or the restructuring of asset portfolios (equity claim replacing credit claim) with non-residents.

The Magyar Nemzeti Bank already adopted the Special Data Dissemination Standard (SDDS) in 1996[3], and in accordance with its requirements, it releases metadata, a comprehensive methodology and a release calendar for the balance of payments (and the other macroeconomic statistical categories required in the standard).

Publications in Hungary

The MNB publishes statistics on the rest of the world in forint and euro in the press and on its website according to a predefined release calendar. The release calendar is updated twice a year, in June and December. The MNB publishes its balance of payments statistics at a monthly and quarterly frequency.

The MNB publishes the monthly balance of payments statistics of the yet unpublished quarter in the period preceding the release of quarterly statistics. The objective of the **monthly data publication** is to provide information to users on the developments in the real economy and financing processes related to the rest of the world with the shortest lag possible following the reference period. These monthly data will only remain posted on the website until publication of the relevant quarterly figures, and the MNB will not publish long time series of monthly data and will not modify them in the course of data reviews.

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[2]This increases the value of investments of non-residents in Hungary and of residents abroad, or the value of equity capital and other capital within an investment direction, or assets and liabilities within other capital.

[3] The SDDS page on Hungary is: http://dsbb.imf.org/Pages/SDDS/DQAFBase.aspx?ctycode=HUN&catcode=BOP00

Simultaneously to the publication of **quarterly data** — on the 85th day following the quarter end under review — the periods preceding the period under review are revised. As the MNB uses data from the HCSO's data collections for its balance of payments statistics, revision policy depends on the revision cycles of the various data sources. The revision period is longer in March and September (3 years), while in June and December it affects only the data of the 'open year'. For the revision policy of the balance of payments statistics this means that in a normal revision cycle, the balance of payments data can be considered final after 11 quarters following the reference year.

The MNB publishes annual balance of payments data in the ninth month following the year under review, the data already including preliminary direct investment statistics containing the detailed sectoral and country breakdown based on the corporate questionnaire, as well as the preliminary data on reinvested earnings based on profit data gleaned from annual surveys.

Annual data is first revised in the 15th month following the year under review, and final balance of payments data are published in the 33rd month following the year under review.

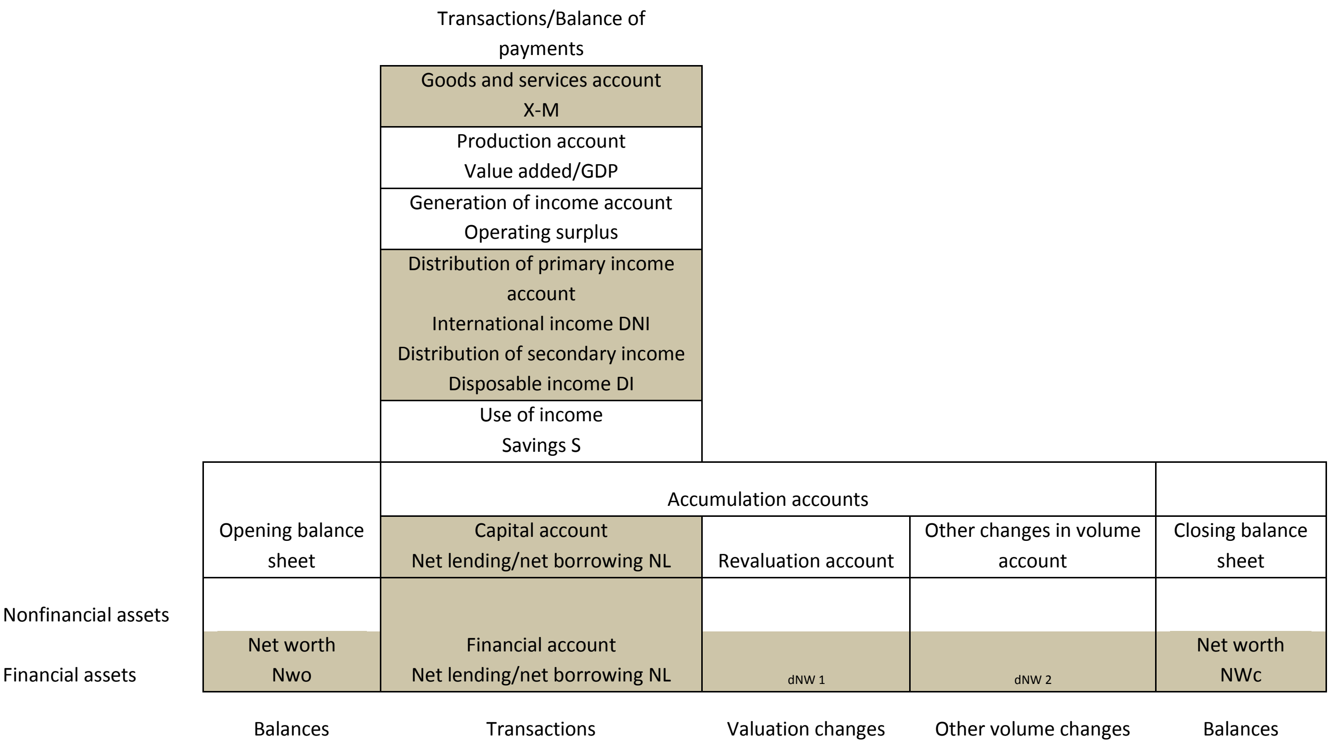
Major components and instruments in the balance of payments and international investment position

In combination, the *balance of payments statistics* and the related *international investment position* provide for the coherent recording of the transactions and positions of an economy vis-à-vis the rest of the world. It essentially corresponds to the rest of the world sector account in the system of national accounts with the exception that while balance of payments statistics present the transactions, assets and liabilities of resident economic sectors vis-à-vis the rest of the world, the rest of the world account looks at the same elements from the perspective of non-residents.

Chart 1 presents the System of National Accounts. Accounts that have their counterparts in the BOP and IIP statistics are highlighted, the balancing items of the various accounts are indicated in bold.

Chart 1

Overview of the key accounts and balancing items of the System of National Accounts as a framework for macroeconomic statistics including International Accounts



where the components relating to the BOP and IIP are highlighted and the name of the balancing item is indicated in bold.

GDP = gross domestic product

S = saving

NL = net lending

NWO = opening level of net worth

NWC = closing level of net worth

dNW1= change in net worth from revaluation

dNW2= change in net worth from other change in volume

Correlations between national account aggregates and the balance of payments

Uses and resources are in balance on the production account of the national accounts. This is the balance between gross output and import, and consumption, intermediate consumption and accumulation. Gross domestic product (GDP) is one of the most typical, extensively used measures of economic output defined as the difference of gross output and intermediate consumption. On the other hand, this measure of output is also an income category as it expresses a volume of income identical with the production measured. GDP does not contain income from abroad: it measures the income produced by the residents of a country rather than the location where such income is earned. If the value of the GDP is adjusted for the balance on primary income (BPI), the gross national income (GNI) is obtained.

If we take tally of transactions involving the rest of the world, i.e., add to the net exports of goods and services the primary income of non-residents and net current international transfers, we obtain the current account balance (CAB).

Correlations between national account aggregates and the balance of payments

$$
\begin{array}{rcll}
\text{Resources} & = & \text{Uses} & (1a) \\
GO + M & = & C + G + I + X + IC & (1b) \\
GDP & & GO - IC & (2a) \\
 & = & C + G + I + (X - M) & (2b) \\
GNI & = & GDP + BPI & (3) \\
GNDI & = & GDP + BPI + BSI & (4a) \\
 & & C + G + I + (X - M) + BPI + BSI & (4b) \\
 & & C + G + I + CAB & (4c) \\
CAB & = & (X - M) + BPI + BSI & (5a) \\
 & & GNDI - (C + G + I) = GNDI - A & (5b) \\
S & = & GNDI - C - G & (6a) \\
 & & I + CAB & (6b) \\
CAB & = & S - I & (7a) \\
 & & (SH - IH) + (SE - IE) + (SG - IG) & (7b) \\
KAB & = & NKT - NPNNA & (8) \\
CAB + KAB & = & S - I + NKT - NPNNA = NFI & (9)
\end{array}
$$

Where

GO = gross output

IC = intermediate consumption

C = private consumption (household consumption expenditure)

CAB = current account balance

G = government consumption expenditure

GDP = gross domestic product

GNI = gross national income

A = domestic use

GNDI = gross national disposable income

I = gross domestic (non-financial) investment

M = imports of goods and services

BSI = balance on primary income

NFI = net foreign (financial) investment (or net lending vis-à-vis the rest of the world)

NCT = net current transfers from abroad

NPNNA = net purchases of non-produced, non-financial assets

CAB = current account balance

BPI = balance on primary income

S = gross saving

X = exports of goods and services

(SH-IH) = net financial savings by households

(SH-IH) = net financial saving by corporations

(SG-IG) = net financial saving by government

The current account balance reflects the economy's savings position vis-à-vis the rest of the world (7a), in other words, whether the value of gross saving relative to gross investment results in borrowing (current account deficit) or lending (current account surplus).

Any amount of the disposable income not used within an economy is automatically recorded in the balance of payments as funds allocated abroad and any domestic use in excess of the disposable income is recorded as borrowing (5b). In order to establish if an economy was a net lender or a net borrower in a specific period, the aggregate balance of the current and capital accounts is needed (9). The relationship between the net financial positions of the individual sectors and the current account balance is shown in equation (7b).

The following section presents the different instruments in line with the applied statistical practice. For the entries of the financial account, the transaction and stock data are discussed within the instrument concerned. We apply standard considerations to each item, thus every description contains a brief discussion of the instrument concerned, the data source(s) used, any estimate(s) applied, the methodological specialities of the instruments, the revision policy applied and the way it is presented in the standard publications.

Current account balance

I. Current account balance (1.A.+1.B.+1.C.)

1.A. Goods and Services
1.B. Primary Income
1.C. Secondary income

As part of the balance of payments, the current account records real economic transactions (the ones related to trade in goods and services), compensation of employees, investment income (income on equity and interest), other primary income and secondary income. Every instrument is presented in a breakdown by income, expenditure and balance.

1.A. Goods and Services

1.A.a. Goods
1.A.b. Services

Goods

Within 1.A.a goods, we present general merchandise, re-exports and non-monetary gold separately, in line with the international methodology. General merchandise includes exports and imports of goods, fuel procured by non-resident carriers in the country compiling the statistics (and similar goods procured by resident carriers abroad). In case of re-exports, acquisitions are presented as negative exports.

The main data source for balance of payments goods is the external trade statistics compiled by the HCSO.

Due to the methodological differences between external trade data and goods in the balance of payments statistics (and national accounts), the following adjustments are made by the HCSO before they are incorporated in the BoP:

- Trade in goods data in the balance of payments are to be valued f.o.b. (i.e. the value at the customs frontier of the exporting economy), thus the c.i.f. value of imports (i.e. the value at the Hungarian frontier) recorded in the external trade statistics is replaced by the HCSO to the f.o.b. value for the compilation of balance of payments statistics.

- Due to the nature of external trade data collection, the lion’s share of the trade in goods relating to non-resident enterprises that are only registered for VAT in Hungary contain value added that does not belong to the resident economy; consequently, this value added must be removed from the balance of payments, and the national accounts, through an estimated adjustment. In parallel, external trade data do not include the value added generated by resident enterprises abroad and recognised through VAT registration that forms part of the resident economy, therefore this value added must be added to the balance of payments, and the national accounts, through an estimated adjustment.

- In external trade statistics, the return of goods is presented on a gross basis, while under the balance of payments methodology it is a reversal item, therefore the trade in goods data received from the HCSO are also adjusted accordingly. In statistics, returned goods are products that are returned in an unaltered state to the seller after they have crossed the frontier as the buyer does not want to keep them (this case is different from goods shipped, for instance, for participation in exhibitions then shipped back, where no change of ownership occurred in the first place). The adjustment for returned goods has no effect on the trade balance (export becomes reversed imports, imports reversed exports).
- Gross turnover of processing (i.e. including goods for processing), which forms a part of external trade statistics, was recorded under goods in balance of payments under BPM5 but under BPM6 it is recorded under services on net basis i.e. taking only fee for processing into account. Turnover of goods for processing (i.e. gross processing turnover excluding fees) is no longer a part of balance of payments at all.

Certain items of trade in goods included in the balance of payments are not included in external trade statistics. For these trade transactions the MNB also receives data from the HCSO based on the quarterly questionnaires on services and uses them to supplement the figures reported. The goods under merchanting item is substantial among these items, and so-called ’bunker’ fuel in vehicles is also included here.

Leased goods s recorded among goods are shown at the market value , in accordance with the general accounting principles applicable to goods. As a counterpart of leased goods, a loan asset or liability is recorded as a financing item under other investment.

In line with the new methodology, trade data received from the HCSO includes the estimated trade in drugs and smuggled goods, as well as high-value goods imported privately, now recorded under goods instead of travel.

In respect of goods, the HCSO revises months 1-12 of the previous year in March and months 1-12 of the previous year and months 1-6 of the reference year in September. These revised data are taken into account in the publications of the MNB in March and September.

Services

1.A.b Services

1.A.b.1 Manufacturing services on physical inputs owned by others

1.A.b.2 Maintenance and repair services not included elsewhere (n.i.e.)

1.A.b.3 Transport

1.A.b.4. Travel

1.A.b.5. Construction

1.A.b.6. Insurance and pension services

1.A.b.7 Financial services

1.A.b.7.1 Explicitly charged and other financial services

1.A.b.7.2 Financial intermediation services indirectly measured (FISIM)

1.A.b.8. Charges for the use of intellectual property n.i.e.

1.A.b.9. Telecommunications, computer, and information services

1.A.b.10 Other business services

1.A.b.11. Personal, cultural and recreational services

1.A.b.12. Government goods and services n.i.e.

Services are different from goods primarily in the nature of their production (preceded by an agreement) and international trade (simultaneous with production).

Data are supplied by the HCSO. The source of the travel data is the border survey conducted by the HCSO, where Hungarians returning from abroad and foreigners leaving Hungary are asked about their expenses related to financing their travel. This is supplemented by a regression estimate for the Schengen borders. The main data source for other services is the questionnaire completed by the enterprises supplying and purchasing foreign trade services as well as administrative sources (e.g., for government and insurance services).

Travel has been renamed in Hungarian (to 'utazás'), as the new translation more aptly reflects the English equivalent of the instrument, but its contents have remained unchanged. For travel, there is a single questionnaire-based survey for a given period, while for external trade in services, data are revised in retrospect in March and September, to be finalised after the 8th quarter following the current quarter. The MNB takes such revisions into account in its publications in March and September.

Processing fees are recorded among services (see Manufacturing services on physical inputs owned by others). In line with the new methodology, repairs are also recognised among services, which had already been reported among services data by the HCSO but reclassified among goods under BPM5.

As a result of the f.o.b./f.o.b. terms of the trade of goods, an additional adjustment is necessary to the data collected on freight as the collected data contain only explicitly stated freight while as a result of the delivery terms of goods, we also need to take into account implicit freight. In the case of trade of goods and the related transportation services, the financing entry to be recorded in the financial account is calculated as the sum of the amounts actually invoiced,, i.e., the delivery terms of the contract. The difference between the contractual delivery terms and the f.o.b. terms contains transport services items that must be recorded as transactions between residents and non-residents. The HCSO estimates such adjustment items and supplies them to be used in the balance of payments as part of transport services.

Trade in patents and know-how arising from R&D, formerly recorded among non-produced, non-financial assets, transactions on the originals and proprietary rights of computer software and applications and audio-visual products are now recorded among services under the new methodology.

Another new element is the recording among financial services of the service element (FISIM) implicitly included in accrual-based interest, the seller being the credit institution sector and the buyers the non-credit institution sector.

The interests disclosed by reporting entities thus include the impact of FISIM. The calculation is performed on the level of the economy as a whole, taking into account the reported data in a breakdown by country, sector and currency.

Under insurance services only the services included in the premium rather than the total premium are recorded as services (the remaining part being disclosed under secondary income.)

In addition, services also include estimates on prostitution ‘services’.

High-value capital goods imported privately are recorded under goods based on the new methodology.

Primary Income

1.B. Primary income
- 1.B.1. Compensation of employees
- 1.B.2. Investment Income
  - 1.B.3. Other primary income

Within primary incomes, a distinction is made between compensation of employees, income from investment (income linked to FDI, portfolio investments, other investment and foreign reserves) and other primary incomes. Since 2004, income has been accounted on an accrual basis in the balance of payments statistics; previously, a cash basis of accounting had been used.

Compensation of employees

Row 1.B.1 is where the gross income received by residents or paid to non-residents as employees is recorded.

Since 2008, for the compensation of employees the MNB has used the HCSO estimates based on administrative data sources (personal income tax, etc.). This is substantially higher than the values calculated in previous years based on cash flow data (which reflected only net income after taxes).

Data for persons employed for one year or less are revised retrospectively for three years, i.e., data become final in the 11th quarter following the reference year.

Investment income

1.B.2. Investment income
- 1.B.2.1. Direct investment income
- 1.B.2.2. Portfolio investment income
- 1.B.2.3. Other investment income
- 1.B.2.4.eserve assets

Income from investment includes income from direct investments, portfolio investments and other investment, as well as on reserve assets recorded in the previous rows.

1.B.2.1. Direct investment income
- 1.B.2.1.1. Equity
  - 1.B.2.1.1.1. Dividends and withdrawals from income of quasi-corporations
  - 1.B.2.1.1.2. Reinvested earnings
- 1.B.2.1.2. Debt instruments

Foreign direct investment income include all income resulted from direct investment relationships between residents and non-residents. (The new methodology has specified the concept of direct investment relationship, with clarification of the role of control — above 50% of voting power — and influence — between 10-50% of voting power —, as well as relationships with fellow enterprises — below 10% — within chains of investment. The relationship is now based on the criterion of voting power instead of equity. The framework applies to relationships among enterprises under the control of an ultimate investor, but forming part of different chains, the enterprise group the enterprises of which are linked by direct investment relationships. The new methodology puts greater emphasis on transactions and positions relating to fellow enterprises. Within direct investment income, from 2013 we also record dividend on fellow enterprises less than 10% voting power, while reinvested earnings only need to be recognised in case of voting power of at least 10%.

Direct investment income consists of income on equity and interest income on debt instruments. There are two procedures for the calculation of income on equity to measure corporate income: the concept taking all elements of profits, including e.g. foreign exchange gains or losses and losses from the write-off of assets (all-inclusive concept) and the one leaving those elements out and taking into account only profits from normal operations (current operating performance concept, COPC). Until 2008, balance of payments statistics applied the all-inclusive concept. The introduction of the corporate questionnaires collecting more detailed information in 2008 facilitated the elimination of income components not related to current operations. The adjusted income is called adjusted profit after tax.

Income on equity includes dividends and distributed branch profits, as well as reinvested earnings.

Dividends and withdrawals from income of quasi-corporations

Dividends are distributed earnings allocated to the owners of equity. Withdrawals of funds from branches if they can be assumed distributed branch profits are reported by the reporting entity and recorded under this item.

However, exception(ally large) dividends (superdividend) must be treated as disinvestment. Superdividends are dividends paid out from an enterprise's retained earnings, or dividends exceeding the adjusted profit after tax.

Dividends must be recorded in the period when the owners declare the distribution of dividends. Upon the introduction of the new data collection system, in 2008 it became possible to record dividends at the time they are declared payable based on the monthly and quarterly questionnaires.

In the publication tables, the *dividends and withdrawals from income of quasi-corporations* row shows dividends of resident investors receivable from abroad on the credit side and dividend payable to non-resident investors on the debit side.

Dividends are gleaned from monthly and quarterly surveys, and annual data supply in case of annually reporting entities, and grossed up by using of the corporate tax return data.

Reinvested earnings

Reinvested earnings are the portion of income due to the owners of equity in addition to distributed income (dividend). The difference between the positive or negative adjusted profit after tax and the dividend declared in the period concerned is reinvested earnings.

As a result of accrual accounting, the value of equity income depends exclusively on the income generated in the reference year — it may be negative if the enterprise made a loss — and thus irrespective of the dividends declared payable or actually paid. The difference between the positive or negative adjusted profit after tax and the dividend declared in the period concerned is reinvested earnings. Following the recording technique, the net income is not affected by the decision made on the distribution of income. If the dividend is higher reinvested earnings will be lower; their sum is equity income. When attempting to understand the quarterly data, the **intra-year distribution of the level of reinvested earnings** often causes a problem. The monthly/quarterly amount of reinvested earnings equals the difference between the monthly/quarterly equity income and the dividend declared payable for the month or quarter under review. In terms of its source, equity investment income (equal to adjusted net profit) in an annual data, its intra-year distribution determined based on the assumption that it is generated relatively uniformly: we use the seasonal distribution of GDP for the income of direct investments in Hungary, and distribute the annual income into quarterly and monthly data for the investments of residents abroad. The latter signifies that one-twelfth/quarter of the annual data applies for one month/quarter. Dividends must be recorded when they are declared. As the majority of firms operate based in the normal business year, general meetings and declaration of dividends are usually held in April or May, thus **the lion's share of annual dividend falls within the second quarter.** For this reason, reinvested earnings are always negative in the second quarter in a quarterly breakdown. However, this negative quarterly reinvested earnings only stems from technical factors, with no underlying 'negative' economic content. It merely means that dividends are higher in the second quarter than equity income.

According to the methodology, reinvested earnings only need to be recorded if the direct investor's voting power exceeds 10%, meaning that they are not recorded for either reverse investment or fellow enterprises.

When recognising reinvested earnings, the reinvested earnings 'on' indirect ownership must also be taken into account along the ownership chain. The first step in recognising reinvested earnings 'on' indirect ownership consists of recognising income from foreign subsidiaries for foreign-owned parent companies.

Income on indirect ownership is the portion of income collected by the foreign parent company, less the dividends (advance dividends) paid out by the foreign subsidiary. (Income generated is reduced by dividends paid (advance dividends) because only dividends actually paid are recorded by the parent company as income.) The income thus defined is recognised among direct investment income, equity and other income and reinvested earnings on the expenditure side.

Data on the so-called COPC (current operating performance concept) adjustment competent of reinvested earnings is obtained from the annual data supply based on the annual reports of enterprises by the end of September following the year under review, extrapolated based on corporate tax returns.

Up to the end of September of the subsequent year, the equity income figure is an estimate.

Interest income on debt instruments

Within direct investments, interest-type income on assets and liabilities other than equity is recorded continuously in the current account due to the accrual basis of accounting. In accordance with the methodology of accrual accounting, interest accrued but not paid in the given period must also be recorded as an increase on the asset or liability side of the appropriate instrument. At the time of interest payment (financial settlement), statistics show a transaction reducing the stock of the financial instrument concerned in the financial account.

Other income includes interest accrued on loans, debt security assets and liabilities as well as interest received or paid in respect of settlement or cash pool accounts. Credits show interest related to assets, debits contain interest relating to liabilities.

Income is also broken down based on the direction of investment (in Hungary or abroad) shown in the international investment position for the asset or liability underlying the interest.

At the same time, debt-type income among financial intermediaries is not part of direct investment income; these are recorded among portfolio or other investment income.

Income on interest is recorded based on monthly and quarterly data supply.

<u>Portfolio investment income</u>

1.B.2.2. Portfolio investment income
- 1.B.2.2.1. Equity and investment fund shares
  - 1.B.2.2.1.1. Equity securities
  - 1.B.2.2.1.2. Investment funds shares
    - 1.B.2.2.1.2.1. Dividends
    - 1.B.2.2.1.2.2. Reinvested earnings
- 1.B.2.2.2. Debt securities
  - 1.B.2.2.2.1. Short-term debt securities
  - 1.B.2.2.2.2. Long-term debt securities

Dividends financially settled on non-enterprise group shares with participation of under 10% traded on the stock exchange and OTC, dividends on investment fund shares and reinvested earnings, alongside accrual-based interest income of debt securities with original maturities of one year or less than or over one year are recorded among portfolio investment income in a breakdown by resident sector.

On the credit side, income on non-resident (issued) securities held by residents are recognised, while on the debit side, Hungarian securities held by non-residents are recognised.

Portfolio investment income is taken over from securities statistics, except for bills. Bills are observed through the data collection for the balance of payments using direct corporate questionnaires.

Income from equity investments below the 10% threshold is recorded at the time of dividends payment; reinvested earnings are not recognised here.

The accrual-based incomes of money market and other investment fund shares are recorded as reinvested earnings. Reinvested earnings are reduced by the amount of dividends when they are paid out.

Debt securities with original maturity of one year or less include Treasury bills, short-term bonds, etc., formerly presented under money market instruments, while long-term debt securities include accrual-based interest formerly recorded under bonds.

<u>Other investment income</u>

1.B.2.3. Other investment income
- 1.B.2.3.1. Withdrawals from income of quasi-corporations
- 1.B.2.3.2. Interest
- 1.B.2.3.3. Investment income attributable to policyholders in insurance, pension schemes, and standardised guarantee schemes

The lion's share of other investment income is made up of interest receivable on unsecuritised assets and interest payable on liabilities. This range of interest-bearing instruments includes various loans, deposits and current accounts.

This is where dividends and withdrawals from income of quasi-corporations outside the enterprise group and investment income attributable to policyholders in insurance, pension schemes, and standardised guarantee schemes are recorded.

Accrual-based accounting interest is presented without financial intermediation services indirectly measured (FISIM), but the latter is recorded in a separate table in a breakdown by resident sector, alongside total accrual-based accounting interest before FISIM.

The source of data is the monthly and quarterly reports of economic agents.

Household incomes and expenditures are available based on the data supplied by central banks and the BIS, and data disclosed to the National Tax and Customs Administration of Hungary (NAV) pursuant to the Council Directive 2003/48/EC by countries disclosing information on the annual interest income of Hungarian private persons.

Income on reserve assets

1.B.2.4. Income on reserve assets presents the accrual-based accounting interests (credits) on all central bank reserve assets.

Income on reserve assets was previously presented under interest income on invested instruments (portfolio and other investments).

Other primary income

1.B.3. Other primary income
- 1.B.3.1. Subsidies, taxes on production and on imports
  - 1.B.3.1.1. General government
  - 1.B.3.1.2. Other sectors
- 1.B.3.2. Rent

Certain EU transfers, product and production taxes, subsidies and rents have been reclassified to this account from unrequited current transfers. These rents are rents amounts payable to the owners of natural resources (land, fishing, forestry, and grazing rights, watercourses) for putting the natural resources at the disposal of another institutional unit for a short defined period.

Secondary income

1.C. Secondary income
- 1.C.1. General government (S.13)
- 1.C.2. Other sectors (S.1-S.13)
- 1.C.3. Adjustment for change in pension entitlement

Secondary income directly affects the level of disposable income. They may be made in cash or in kind. As a rule, they are made regularly for small amounts. The composition of secondary income differs from the earlier category of unrequited current transfers is that taxes on products and taxes on production and subsidies were transferred to primary incomes.

Data on the secondary incomes of the general government and households are provided by the HCSO (supply of aid from the external trade statistics) while for other sectors, the HCSO figures are supplemented by data from the direct corporate reports to be included in the balance of payments.

Until 2009 September, the balance of payments contained transfers from the European Union on a cash basis, i.e., the funds received from the Commission were recorded at the time of their receipt as other primary income, secondary income or capital transfer income. Since then, however, we have adopted accrual accounting, therefore transfers are recorded at the time of their use. Accrual data had been back casted until 2004. Another significant change impacts on the sectoral breakdown of data: they need to be recorded directly as the revenue of the final beneficiary. This also applies to transfers received from the European Union recorded among primary incomes.

Under its revision policy, the HCSO considers secondary incomes relating to employment income (taxes on income and wealth, social security contributions, workers' remittances, social benefits in cash) to be final only after three years, i.e., in the 11th quarter after the reference year; until that time the figures may be modified.

Capital account

2. Capital account (2.1+2.2)

2.1. Gross acquisitions/disposals of non-produced non-financial assets

2.2. Capital transfers

2.2.1. General government

2.2.2. Other sectors

The capital account, a subdivision of the accumulation accounts, contains capital transfers on the one hand, and transactions related to the change of ownership of non-produced, non-financial assets on the other hand. The sum of the balances on the current and capital accounts represents the net lending or net borrowing by the economy vis-à-vis the rest of the world.

Gross acquisitions/disposals of non-produced non-financial assets

An item for recording transactions relating to the change of ownership of intangible assets (natural assets, contracts, leases, licenses, marketing assets and goodwill). The main change compared to the previous methodology is that proprietary rights amounts payable for transactions involving proprietary rights arising from research and development, the originals and proprietary rights of computer software and applications, and audiovisual products are no longer included here; these are now recorded under the adequate services category.

An item for recording transactions relating to the change of ownership of intangible assets. The Magyar Nemzeti Bank's normal balance of payments statistics revision policy therefore applies to these data.

Capital transfers

Capital transfers are investment grants, fixed assets provided free of charge as well as debt forgiveness based on the mutual agreement between debtor and creditor. A capital transfer changes the stock of non-financial or financial assets (wealth) of the parties involved in the transaction. Though it is not a requirement, capital transfers are typically large and infrequent.

The source of data is the HCSO for the general government and direct reporting by economic entities for other sectors. For information on the EU transfers recorded here, see the sub-chapter on Secondary incomes.

A large part of capital transfer data are transmitted by the HCSO to the MNB, therefore revision policy differs slightly from the MNB's general revision policy. Annual data are revised in March and September due to the compilation of the EDP report, while general revision can carried out for a period of up to three years. Quarterly data can be revised retrospectively for the quarters of the year under review during every quarter if new, more accurate information is obtained or errors need to be corrected.

Moreover, ad-hoc or large-scale revision can be carried out when new methodological standards, concepts, classifications, etc. are introduced, with no frequency or periodic limit.

The financial account and the international investment position

3. The financial account (net assets) (3.1+3.2+3.3+3.4+3.5)

3.1. Direct investment (net assets)

3.2. Portfolio investment (net assets)

3.3 Financial derivatives and employee stock options (net assets)

3.4. Other investment (net assets)

3.5 Reserve assets

4. Net errors and omissions

The financial account shows the financial assets that are responsible for the surplus (**net lending**) or deficit (**net borrowing**) of the sum of the current account and capital account balances. Accordingly, the financial account contains capital transactions in a functional breakdown, i.e., it shows transactions relating to direct investment, portfolio investment, financial derivatives, other investment and international reserves separately. The combined surplus/deficit of the current and capital accounts is theoretically equal to the balance of the financial account, but in practice, they diverge by NEO.

That is because the financial account shows how the transactions in the current and capital accounts are financed. If, for example, the balance of the current and capital accounts shows a deficit (that is, financing capacity is negative, and a borrowing requirement arises), the resident economy needs to borrow from non-residents based on the financial account (it needs to decrease one or more of its financial instrument net assets or use up foreign reserves). Conversely, if net lending vis-à-vis non-residents is positive based on the balance of the current account and capital account, then the resident economy has supplied the same amount of net credit to non-residents based on the financial account.

Under the balance of payments methodology, **reserve assets** are liquid assets controlled by and readily available to monetary authorities: in the event of payment difficulties they can be used directly to perform payment, indirectly to ease financial pressure by intervention in exchange markets to affect the exchange rate of the national currency or for any other purposes. The balance of payments exclusive of foreign reserves reveals whether there is a surplus or deficit in financing and it restores equilibrium by adjusting the level of reserves as appropriate for the balance.

The structure of the **international investment position** by financial instrument is identical with the structure of the financial account and it corresponds to the classification of the investment income categories in the current account. This assures the reconciliation of flow and stock data and the consistent accounting for the earnings related to the various investment categories.

The published IIP table contains financial instruments corresponding to the structure of the financial account:

1. direct investment (equity and reinvested earnings; other capital)
2. portfolio investment (equity, bonds and notes, money market instruments),
3. financial derivatives and employee stock options,
4. other investment broken down by original maturity,
5. reserve assets (of which monetary gold).

In respect of the instruments in the financial account, the reporting entity survey required by the MNB constitute the source of data, thus the standard revision policy of the MNB for the balance of payments statistics is applicable.

Direct investment

One of the key elements of the new methodology is a **clearer, more accurate definition of the direct investment relationship framework**, with clarification of the role of control (above 50% of voting power) and influence (between 10-50% of voting power) within chains of investment, as well as relationships with fellow enterprises (below 10%). The direct investment relationship is now based on the criterion of voting power instead of equity. The framework applies to relationships among enterprises under the control of an ultimate investor, but forming part of different chains, the enterprise group the enterprises of which are linked by direct investment relationships. The new methodology puts much greater emphasis on transactions and positions relating to fellow enterprises, and their distinction in publications. The use of corporate balance sheet data also plays a greater role. A key difference lies in the fact that voting power of under 10% within the enterprise group

Most of the changes consist in the more detailed presentation of data with new breakdowns (e.g. the recognition of shares in affiliated undertakings, reverse investment (shares in the parent company) and transactions/positions among fellow enterprises in different rows). In the standard presentation of the balance of payments statistics, a breakdown by assets and liabilities is integrated alongside a supplementary breakdown by the direction of investment.

The data of the new methodology cannot be retroactively revised for direct investment, as neither voting power ratios, nor the classification of enterprise group members can be applied backwards in time. This led to a break in these time series.

Direct investments broken down by assets and liabilities:

3.1. Direct investment, net assets
3.1.k. Direct investment, total assets
3.1.1.k. Equity
3.1.1.1.k. Equity other than reinvestment of earnings
3.1.1.1.1.k. Direct investor in direct investment enterprises
3.1.1.1.2.k. Direct investment enterprises in direct investor
3.1.1.1.3.k. Between fellows
3.1.1.2.k. Reinvestment of earnings
3.1.2.k. Debt instruments
3.1.2.1.k. Direct investor in direct investment enterprises
3.1.2.2.k. Direct investment enterprises in direct investor
3.1.2.3.k. Between fellows
3.1.t. Direct investment, total liabilities
3.1.1.t. Equity
3.1.1.1.t. Equity other than reinvestment of earnings
3.1.1.1.1.t. Direct investor in direct investment enterprises
3.1.1.1.2.t. Direct investment enterprises in direct investor
3.1.1.1.3.t. Between fellows
3.1.1.2.t. Reinvestment of earnings
3.1.2.t. Debt instruments
3.1.2.1.t. Direct investor in direct investment enterprises
3.1.2.2.t. Direct investment enterprises in direct investor
3.1.2.3.t. Between fellows

Thus the main breakdown in the balance of payments is also by assets and liabilities among direct investments. Gross assets and gross liabilities are aggregated in the breakdown by assets and liabilities. In addition, classification based on the directional principle will also be maintained in publications. The main difference compared to the earlier version is that among the transactions and positions among fellow enterprises, those with non-resident ultimate investors will be recorded among the investments of non-residents in Hungary, while those with resident ultimate investors will be recorded among the investments of residents abroad. For fellow enterprises with unknown or no ultimate investor, their liabilities will be recorded among the investments of non-residents in Hungary while their assets recorded among the investments of residents abroad. In the breakdown based on the directional principle, reverse investment and capital movements among fellow enterprises of opposite direction to the direction of investment decrease the amount of net investment.

Direct investment broken down by direction:

3.1.ki Direct Investment abroad
3.1.1.ki Equity
3.1.1.1.ki Equity other than reinvestment of earnings — transactions only

3.1.1.1.1.ki Equity other than reinvestment of earnings — Direct investor in direct investment enterprises
3.1.1.1.2.ki Equity other than reinvestment of earnings — Between fellows (Ultimate controlling parent is non-resident)

3.1.1.2.ki Reinvestment of earnings — transactions only
3.1.2.ki Debt instruments
3.1.2.1.ki Debt instruments, assets
3.1.2.1.1.ki Debt instruments — Direct investor in direct investment enterprises
3.1.2.1.2.ki Debt instruments — Between fellows (Ultimate controlling parent is non-resident)
3.1.2.2.ki Debt instruments, liabilities
3.1.2.2.1.ki Debt instruments — Direct investor in direct investment enterprises 3.1.2.2.ki Debt instruments — Between fellows (Ultimate controlling parent is non-resident)
3.1.be Direct investment in Hungary
3.1.1.be Equity
3.1.1.1.be Equity other than reinvestment of earnings — transactions only
3.1.1.1.1.be Equity other than reinvestment of earnings — Direct investor in direct investment enterprises
3.1.1.1.2.be Equity other than reinvestment of earnings — Between fellows (Ultimate controlling parent is non-resident)
3.1.1.2.be Reinvestment of earnings — transactions only
3.1.2.be Debt instruments
3.1.2.1.be Debt instruments, assets
3.1.2.1.1.be Debt instruments — Direct investor in direct investment enterprises
3.1.2.1.2.be Debt instruments — Between fellows (Ultimate controlling parent is non-resident)
3.1.2.2.be Debt instruments, liabilities
3.1.2.2.1.be Debt instruments — Direct investor in direct investment enterprises
3.1.2.1.2.be Debt instruments — Between fellows (Ultimate controlling parent is non-resident)

The distortive statistical effects of globalisation have the greatest impact on direct investment, which should be presented separately according to the recommendations of the new methodology. Analysts of direct investment data are mainly interested in the amount of fresh capital inflows within the investments reflected in statistics, which then exerts a positive impact on employment, creates new know-how and boosts the economy. However, as a result of globalisation, an increasing amount of transactions consist of merely relocating funds from one country to the next in order to achieve optimisation or specialisation on the multinational corporation level. Another common occurrence is that capital movements erase the distinction between equity investment and debt instruments. Oftentimes equity investment flows into the country and exits it in the form of credit to another foreign subsidiary. Aggregate data may therefore hold more valuable information instead of a breakdown by instrument, as the aggregate data nets out capital rearrangements among instruments.

From a statistical perspective, capital investments that boost the economy are ones that are hard to defined, delineate and compile data on. Thus the international methodological approach has shifted in the opposite direction: we attempt to separate everything that we know is capital leaving the Hungarian economy unaffected from the investment data, and consider the remainder as what is closest to being ‘true’ direct investment.

Separation of the activities of e special purpose entities (SPEs) is essential among the parts to be presented separately. Hungary has compiled the BOP and IIP separately including and excluding special purpose entities since January 2006. The introduction of the new methodology now required all countries to present the transactions and positions of special purpose entities separately, allowing greater comparability of various national data.

Pass-through funds and asset portfolio realignment are two phenomena that the stored data among normal enterprises that do not include SPEs, represent large-scale movement of funds consisting of capital transfers within multinational corporations from one country to the other without having any economic impact in the country. In Hungary, due to its small economy and the size of certain large multinational corporations, the scale of such capital transfer transactions can distort data so substantially if they are not presented separately that it would render the published transactions uninterpretable. We publish capital in transit and asset portfolio realignment transactions going back to 2008, alongside direct investment data excluding these items.

Cross-border mergers and acquisitions (M&A) are also presented separately in line with the recommendations of the international methodology, as these do not create new capital either, only assigning a new owner to existing capital investments. With the new methodology, international institutions are compiling data on cross-border mergers and acquisitions within equity investment on a voluntary basis for the time being. Since 2008, changes of ownership between non-resident investors are also recorded (as a stock increase for one investor and a stock decrease for the other), and cross-border mergers are also recorded as transaction, however these are not presented separately in aggregate figures.

Equity (formerly equity, other equity and reinvested earnings)

- *Direct investment abroad, Equity capital* transactions contain registered capital- or capital reserve increase or decrease by residents in non-resident enterprises as well as the acquisition or sale of equity by a resident investor in a non-resident enterprise. Acquisition and sale of equity by a non-resident entity in a resident investor below the 10% threshold is recorded here (reverse investment) Capital withdrawals stemming from extraordinary dividend are also presented in this row.
- *Direct investment in Hungary, Equity capital* transactions contain registered capital- or capital reserve increase or decrease by non-residents in enterprises registered in Hungary as well as the acquisition or sale of equity by a non-resident investor in a resident enterprise. Acquisition and sale of equity by a Hungarian enterprise in a non-resident investor below the 10% threshold is recorded here (reverse investment). Capital withdrawals stemming from extraordinary dividend are also presented in this row.

Real estate investments recorded under equity capital are estimates since 2008.

Intra-group debt forgiveness is also recorded among direct investment equity instead of unrequited capital transfers.

Direct investment in Hungary, Equity capital transactions contain the cumulated stock arising from income on indirect ownership.

Assets and liabilities relating to equity capital are valued at market prices in case of listed companies, while for unlisted enterprises, the valuation is based on the own funds at book value (OFBV) in the balance sheet of the non-resident enterprise for outward direct investment and of the resident enterprise for inward direct investment.

For equity capital within direct investment, the transaction data are obtained from monthly and quarterly questionnaires, stock data from yearly questionnaires. The also estimate transaction data based on annual surveys.

In case of the direct investments of non-residents in Hungary in the form of equity, we supplemented the questionnaire data with the data of enterprises in which, according to the corporate income tax return database (TÁSA), the ownership of non-residents was at or above 10% and the enterprise submitted no yearly questionnaire. At the same time, we employ a low threshold (HUF 10 million) in the survey in case of the investments abroad of residents, which means that the observation is essentially comprehensive, and the absence of an external data source for extrapolating survey data does not lead to any distortion.

Reinvestment of earnings

The reinvested earnings recorded within *direct investment abroad in the financial* account is identical with the recorded the reinvested earnings as income credit in the current account, while the *reinvested earnings* within *Direct investment in Hungary* equals the reinvested earnings as income debit in the current account.

Reinvested earnings only need to be recorded in case of voting power in excess of 10%, and do not need to be recorded in relationships among fellow enterprise or in case of reverse investment.

In reinvested earnings, we record price changes on equity securities, exchange rate changes or other stock changes, depending on the nature of the adjustment, in an amount identical with the COPC adjustment but with an opposite sign, to adjust the size of pre-tax profits.

Debt instruments

The contents of the category remained the same as under the previous methodology: *other capital* (known even before under the popular name of *inter-company loans*). The name of the category suggest the debt-type nature of the transactions: it includes loans, debt securities (now not only inter-company loans, but also loans among (corporate) group members direct investment within a direct investment relationship). It also includes are assets and liabilities due to dividends; credits; intercompany accounts (cash pool, zero balancing), trade credits as well as other assets and liabilities including the ones relating to capital paid up but not registered.[4]

For *debt instruments*, flow and stock data are derived from monthly and quarterly questionnaires. Enterprises are added to the sample of respondents to the quarterly questionnaires based on a threshold.

Assets and liabilities relating to *fellow enterprises* are classified under the directional principle depending on whether the reporting entity has any non-resident direct or indirect ultimate investor.

If the reporting entity

- has a non-resident ultimate investor, both assets and liabilities are recorded under direct investment in Hungary,
- has a resident ultimate investor, both assets and liabilities are recorded under direct investment abroad,
- has an unknown ultimate investor, assets are recorded under direct investment abroad and liabilities are recorded under direct investment in Hungary

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Prior to this, until 2013 entities were distinguished not based on the ultimate investor, but based on the resident status of the direct investor/investment: assets and liabilities relating to fellow enterprises are classified under the directional principle depending on whether the reporting entity has any non-resident direct or indirect investor (parent) or direct or indirect investment abroad (subsidiary).

If the reporting entity

- has a non-resident parent but no non-resident subsidiary, or if it has both non-resident parent and subsidiaries, both assets and liabilities are recorded under direct investment in Hungary,
- has only a non-resident subsidiary, both assets and liabilities are recorded under direct investment abroad,
- if the reporting entity has neither non-resident parent nor non-resident subsidiary — for instance, the enterprise is owned by a foreign-owned resident company—, assets are recorded under direct investment abroad, liabilities under direct investment in Hungary.

Before 2008, debt instruments were recorded only based on (settlements) cash flows; stocks were calculated by the accumulation of flows and revaluations. Therefore there was no stock data available in a breakdown by country and activity prior to 2008. Since the introduction of the new data collection system based on reporting entity reports in 2008, debt instrument data has also been reported by reporting entities, thus country and sectoral breakdowns can be generated.

In accordance with international methodology guidelines, the activity breakdown of published direct investment data uniformly shows the activity of the resident party in a breakdown of investments by sector under both transactions and stocks (that is, classification takes place based on the activity of the Hungarian party in case of the

[4] Expanded content of debt instruments: Since 1995, they contain non-equity-related debt relationships between the parent and the subsidiaries. Since 2002, financial transactions vis-à-vis clearing centres within an enterprise group have also been recorded in this row. Since 2008, other intragroup assets and liabilities relating to group members have been recorded fully in this category.

investments of non-residents in Hungary and based on the activity of the foreign subsidiary in case of the investments of residents abroad).

Furthermore, the assets and liabilities of banks and other financial intermediaries on/to their parents and subsidiaries have been included among other investment rather than under direct investment since 2008, in line with the new methodology.

Portfolio investment

3.2. Portfolio investment

3.2.1. Equity and investment fund shares

3.2.1.1. Equity securities

3.2.1.2. Investment fund shares

3.2.2. Debt securities

3.2.2.1. Short-term debt securities

3.2.2.2. Long-term debt securities

The category of **portfolio investments** includes financial instruments traded on stock exchanges or other financial markets (excluding negotiable financial instruments recorded under direct investments and constituting reserve assets).

Assets include securities issued by non-residents, while liabilities include securities issued by residents, irrespective of whether they were issued on a Hungarian or foreign market. The publication features a breakdown by resident sector showing the holder of the security asset and the issuer of the security debt.

Securities temporarily changing hands in the context of repo transactions are recognised under their economic owner instead of their custodial owner, in other words their positions and transactions are recorded as loan receivables/payables under other investments, instead of portfolio investments.

Stock exchange and OTC shares of under 10% outside the enterprise group and money market and other investment fund shares, irrespective of their percentage limit, are recorded under equity and investment fund shares.

Debt securities are classified according to their original maturity, being either short-term (e.g. treasury bills, short-term bonds) or long-term (e.g. bonds, mortgage bonds).

The primary source of data is the securities statistics, which monitors stocks of Hungarian securities held by non-residents and foreign securities held by residents, security-by-security, based on the reporting of Hungarian custodians and direct corporate questionnaires. Data supplied by custodians is supplemented by the stock of securities in custody outside Hungary as reported by their resident owners. Transactions are calculated from changes in stock, after adjustment for price and exchange rate fluctuations.

Bills are observed through the data collection for the balance of payments using direct corporate questionnaires.

In case of the foreign securities holdings of households, in the absence of direct household surveys, information is available only on securities reported by resident custodians, therefore the stocks and flows of households' securities in custody abroad are estimated.

Financial derivatives and employee stock options

3.3. Financial derivatives and employee stock options

3.3.k Assets

3.3.t Liabilities

The name and contents of financial derivatives within national accounts was extended to include employee stock options. The adding of employee stock options to the name within the functional category of financial derivatives reflects this change. However, this change only has negligible impact in terms of the balance of payments.

In the case of derivatives, the balances of positive and negative positions (assets and liabilities) are shown separately in publications, in a sectoral breakdown.

The data are derived from the reports of economic entities on their own positions and transactions. Since 2008, the derivatives assets and liabilities of other sectors on non-residents have included the transactions estimated from the aggregate balance sheet data of investment funds excluding money market funds (F04 report). The general government, credit institutions and the MNB had reported their stock of financial derivatives on the basis of the valuation of contracts at a market value prior to that date. Corresponding information on the financial derivative positions of other sectors have been available since 2008.

A transaction is recorded under financial derivatives liabilities in the following cases: premium received on written options, transactions related to derivative positions having negative net present value at the time of the valuation, closing derivative positions with a net loss and the amount paid for the exercise of the written option.

A transaction is recorded as a financial derivative asset in the following cases: premiums paid on purchased options, transactions related to derivative positions having positive net present value at the time of the valuation, transactions related to the closing of derivative positions with net gains and amounts received as a result of the exercise of purchased options.

Open forward contracts are disclosed as assets if at the closing of the transaction at the market price prevailing at the end of the period the derivative position would show a net gain, and as a liability if it would show a net loss. The buyer of the option remains the creditor and the writer of the option remains the debtor throughout the life of the contract.

Other investment

3.4. Other investment

- 3.4.1. Other equity
- 3.4.2. Currency and deposits
- 3.4.3. Loans
- 3.4.4. Insurance, pension schemes, and standardised guarantee schemes
- 3.4.5. Trade credits and advances
- 3.4.6. Other accounts receivable
- 3.4.7. SDRs (debt stemming from SDR allocation) only recorded among liabilities

Other investment contains financial instruments not classified under direct investments, portfolio investments and international reserves in a breakdown by resident sectors.

Participations below 10% within the enterprise group are under direct investments, while unsecuritised participations below 10% outside the enterprise group and participation in international organisations are presented under other investments.

Deposits, loans, trade credits and other receivables/payables are broken down into either short-term or long-term categories based on their original maturity. Deposits include current accounts, fixed and other deposits, while financial leases and repos are recorded among loans.

The rows for insurance, pension schemes, and standardised guarantees introduced under the new methodology include the various insurance technical reserves, claims on pension funds and standardised guarantee reserves.

Trade credits contain deferred payments on goods and services and advance and progress payments. Receivables include deferred payments of buyers on exports and advance and progress payments to suppliers, while payables include deferred payments to suppliers and advance and progress payments by importers.

Other assets and liabilities include transit items not stemming from goods and services. The assets and liabilities arising from the accrual accounting of EU transfers are recorded here.

Currency in row 3.4.2. (Currency and deposits) can only be recorded among assets, while 3.4.7. SDRs (debt stemming from SDR allocation) can only be recorded among liabilities.

The data source is direct reporting to the MNB by economic entities with external economic relations, supplemented by various estimates. The deposit assets with maturity of one year or less are supplemented with the aggregate balance sheet data of investment funds excluding money market funds.

Households data are estimated using the data on the loan and deposit stock of Hungarian households in the monetary statistics of foreign central banks.

Reserve assets

3.5 Reserve assets

3.5.1.k. Monetary gold

3.5.2.k. SDR

3.5.3.k. Reserve position in the IMF

3.5.4.k. Currency and deposits

3.5.5.k. Securities

3.5.6.k. Other reserve assets

International reserve assets are liquid external assets of the central bank on non-residents that are readily available in the case of payment difficulties or indirectly to influence the national currency through an exchange rate intervention, or for any other purposes.

International reserves include, in accordance with the international methodology,

- monetary gold, including gold bullion and unallocated gold accounts,
- SDR holdings,
- reserve position in the IMF,
- various liquid foreign exchange assets (currency, current account, liquid deposits, securities and other reserve assets).

The source of the data is the balance sheet of the MNB.

In case of securities, changes in reserves are calculated based on the change in stock adjusted for revaluation and other stock changes, while for current accounts, monetary gold, SDR holdings, deposits or other assets, the net transactions are directly reported by the MNB. Both gold and securities are published at market value.