

Methodology of the compilation of the balance of payments and international investment position statistics

General remarks

In Hungary the central banks is responsible for compiling the balance of payments and the international investment position, i.e. specify the amount of and changes in assets and liabilities vis-à-vis non-residents. Up to 2014 the compilation of the balance of payments will be based on the international statistical methodology set out in the fifth edition of the Balance of Payments Manual of the IMF (BPM5). In 2014 will be the sixth edition (BPM 6) implemented.

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.¹

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. The central bank incorporates a number of statistical data on BOP instruments collected by the HCSO. 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).

While in the previous system the compilation of the BOP mainly relied on the use of transaction codes for payments based on reports by credit institutions, in the new regime the MNB obtains the necessary information directly from economic entities. 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.

¹ See also balance of payments minisite: <http://english.fma.mnb.hu/>

Division of labour between the HCSO and the MNB

Balance of payments instruments	Financial and non-financial corporations	General government	Households
Goods	HCSO		
Services	HCSO		
Compensation of employees	HCSO		
Direct investment income	MNB		
Portfolio investment income	MNB		
Other investment income	MNB		
Current transfers	HCSO/MNB	HCSO	HCSO
of which: EU transfers	HCSO		
Capital transfers	HCSO/MNB		
of which: EU transfers	HCSO		
Foreign direct investment - shares	MNB		
Foreign direct investment - other equity	MNB		
Portfolio investment	MNB		
Financial derivatives	MNB		
Other investment	MNB		

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:

- 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).

Hungary has compiled the BOP and IIP separately including and excluding special purpose entities since January 2006, in order to correct for the distorting effects of data on SPEs. Interpreting the large

difference between the two sets of data is a source of difficulty in every country where, similarly to the case of Hungary, special purpose entities conduct significant activities.

Under an amendment to the Corporate Taxes Act in November 2002 effective from 1 January 2003, enterprises with off-shore status cannot be established in Hungary and the existing off-shore firms must be transformed into normal businesses by 1 January 2006 the latest. When their legal status was withdrawn, there were two typical types of off-shore companies present in Hungary. In one of them, the Hungarian companies mostly played a passive intermediary role in transactions, thus they had negligible income from transactions with residents. Unless they changed their activities, we classified them among special purpose entities. The other class consisted of off-shore enterprises that also had some real economy operations or that switched to normal operation. These were reclassified as normal enterprises.

The MNB defines the scope of special purpose entities in conjunction with the HCSO. For the compilation of the SPE register, we use those of the available indicators that capture the main characteristic of these undertakings, i.e., that they predominantly operate abroad and they have minimum links to the domestic economy.

Some criteria used in practice:

- They are always 100 % foreign owned.
- 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 (less than 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.

In countries significantly affected by foreign capital movements, and thus in Hungary as well, the evaluation and treatment of the effect of capital movements that have a less direct impact on the functioning of the resident economy (this is called capital in transit) causes problems. Capital in transit means transactions within a multinational enterprise group that pass through the compiling economy without making an impact. These transactions do not finance development projects, capital investment or other activities in Hungary; consequently, they distort the statistics on the components of foreign direct investment. Thus their effect on statistical data is comparable to the impact of special purpose entities (SPEs). For this reason, since September 2012 capital in transit transactions are shown in a separate table backdated to 2008 on the MNB's website.

For example, if a Hungarian company uses its funds received in form of equity capital from a foreign investor to acquire or create equity capital investment abroad or to increase an already existing equity capital investment, or uses these funds to on-lend abroad, the transaction is recorded as capital in transit. Acquisitions of equity or lending to a foreign subsidiary or a member of a foreign group of companies using funds borrowed from foreign investors or other members of a foreign group of companies are also recorded as capital in transit. By contrast, conversions of foreign debts/claims into a capital increase or repayments of foreign debts/claims from a capital increase, settlements of foreign receivables or trade liabilities as well as reallocations of asset portfolios related to non-residents (an equity asset instead of a loan claim) are not treated as capital in transit. In 1996 the Magyar Nemzeti

Bank has joint the Special Data Dissemination Standard (SDDS²) of the International Monetary Fund 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).

National publication

Statistical data are published in Hungarian forints (HUF) and euros (EUR), as scheduled in the advance release calendar, through the media and on the MNB's website. The advance release calendar is updated twice annually, in June and December. The MNB publishes BoP statistics on a quarterly basis, on the 90th day following the end of the reference quarter. Simultaneously with the publication of quarterly data, data for the period preceding the reference period are revised. Since the MNB takes data from the HCSO for the compilation of the balance of payments statistics, the revision policy depends on the revision cycles of the different data sources. The revision period is longer in March and September, 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 BoP data for the reference year +15 months. By that time the detailed foreign direct investment statistics have been prepared on the basis of corporate questionnaires broken down by sector and country. Annual data are revised for the first time for the reference year+9 months. Final BoP data are published for the reference year + 33 months.

For more detail on the compilation of Hungary's balance of payments and international investment position statistics, see the MNB's 2012 [publication](#).

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

The chapter on the main components and instruments of the balance of payments presents the various instruments. For the entries of the financial account, the transaction and stock data are discussed within the instrument concerned. We tried to 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, and the revision policy applied.

²For more detail on the SDDS, see Footnote 35. The Hungarian page of the SDDS can be found here:

<http://dsbb.imf.org/Pages/SDDS/CtyCtgList.aspx?ctycode=HUN>

I. *Current account*

As part of the balance of payments, the current account records real economic transactions (the ones related to trade in goods and services), investment income (income on equity and interest), compensation of employees and current transfers.

The balance on the current account reflects a country's saving position vis-à-vis the rest of the world, while the sum of current and capital account balances shows the country's net lending (+) or net borrowing (-) position.

1. Goods

Within goods, no breakdown beyond designation as export and import is published.

Goods cover general merchandise turnover between residents and non-residents, goods for processing, repairs on goods, fuel and other supplies procured by non-resident carriers in the country compiling the statistics (and similar goods procured by resident carriers abroad) and non-monetary gold, i.e., gold that is not part of international reserve assets.

The data on the external trade in goods and services obtained from the Intrastat/Extrastat system and compiled by the HCSO are incorporated into the balance of payments statistics.

Due to the methodological differences between external trade and balance of payments statistics, 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 trade in goods relating to non-resident enterprises that are only registered for VAT in Hungary contain a 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 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).
- Certain items of trade in goods included in the balance of payments (e.g. 'bunker' fuel in vehicles, fees for repairs) 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 external trade figures reported.

Financial leasing recorded among goods is shown at the market value of the leased goods, in accordance with the general accounting principles applicable to trade in goods. Related to financial leases, a loan asset or liability is recorded as a financing item under other investment.

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. The MNB takes such revisions into account in its own publications in March and September.

2. Services

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

Eleven groups of services are distinguished in the publication:

- 1 Transportation services,
- 2 Travel [personal and business travel],
- 3 Communication services,
- 4 Construction services,
- 5 Insurance services,
- 6 Financial services,
- 7 Computer and information services,
- 8 Royalties and license fees,
- 9 Other business services [merchandising and other trade-related services, rental fees, miscellaneous business, professional and technical services (legal representation, PR, translation, interpretation, security services etc.)],
- 10 Personal, cultural and entertainment-related services [audio-visual and related services, other cultural and recreational services],
- 11 Government services.

Data are supplied by the HCSO. Main data sources include direct corporate questionnaires, border surveys and administrative data. 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. 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).

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 transportation services as the collected data contain only explicitly stated transportation fees while as a result of the terms of goods trade, we also need to take into account implicit transportation fees. That is because in the case of the trade of goods and the related transportation services, the balance of 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 transportation 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 transportation services.

Re-exports are recorded in accordance with the international methodology, on a net basis. Under insurance services only the service included in the premium³ rather than the total premium is recorded as a service (the remaining part⁴ being disclosed under transfers.)

³ gross premiums payable by policyholders to maintain insurance cover and premium supplements payable

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.

3. Income

Labour income (compensation of employees employed for less than one year), direct investment income, portfolio investment income and income from other investment are recorded separately. 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

This 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).

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.

Direct investment income⁵

Direct investment income includes income on equity, including dividends, reinvested earnings as well as interests on other capital.

The source of the data is the monthly, quarterly and yearly reports supplied to the MNB. After September following the reference year, reinvested earnings for the total economy are calculated based on the data from annual reports and corporate tax returns. Up to the end of September of the subsequent year, the equity income figure, including reinvested earnings, is an estimate. The estimate is based on forecasts of the stock of investment and of its profitability.⁶

Dividends

Dividends are distributed earnings allocated to the owners of equity. 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.⁷

⁴ total income including premium supplements net of service charges

⁵ For more details on the methodology of foreign direct investment, see Chapter 2 of the thematic publication of the MNB updated in April 2007: http://english.mnb.hu/Root/Dokumentumtar/ENMNB/Kiadvanyok/mnben_statistikai_kiadvanyok/mukt_en.pdf.

⁶ The estimate is consistent with the forecasts in MNB's *Report on Inflation*.

⁷ In respect of the pre-2008 periods, information on the actual size of the dividends was available only from the annual questionnaires; therefore, declared dividends were allocated within the year based on estimates.

In the publication tables, the credit side of dividends shows dividends of resident investors received from abroad and dividend payable to non-resident investors on the debit side.

Reinvested earnings

Reinvested earnings are the portion of income due to the owners of equity in addition to distributed income (dividend).

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. As dividends may be declared from profits other than the current year's, reinvested earnings may be negative even where the corporation makes a profit, reflecting the fact that the investor withdrew more income from the enterprise at the expense of the equity of the enterprise. According to BPM6, dividends paid from reserves (extraordinary dividend/superdividend) will have to be treated in the financial account as a withdrawal of equity rather than as dividend. The exceptional nature of extraordinary dividends is shown by their level being greatly in excess of previous dividends and of trends in earnings. The excess above the regular level of earnings must be shown as a withdrawal of equity.

Following from the accounting technique, the income account balance is not affected by the decision made on the distribution of income as the same amount is recorded, with the opposite signs, once as dividend and then as reinvested earnings. The greater deficit of the current account due to reinvested earnings is always financed automatically in the financial account, requiring no additional funds to be raised.

There are two procedures for the calculation of direct investment income 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). Up to 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 day-to-day operations, thus the application of the COPC adjustments recommended by international statistical methodologies.

Other income

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.

Direct investment income (broken down to dividend, reinvested earnings and interest) by country and by activity can be found on the MNB website on the page of Direct Investment, in the excel file called tables of the direct investment publication.

Portfolio investment income

Portfolio investment income includes income from equity, bonds and notes and money market instruments.

Data on accrued interest on portfolio investments is obtained from the securities statistics. Bills and unsecuritised equity participations below the 10% ownership threshold are observed through the data collection for the balance of payments using direct corporate questionnaires.

Income from equity investments below the 10% threshold are recorded at the time of dividends payment.

Other investment income

Other investment income comprises interest due/payable on assets and liabilities, respectively.

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

For households, estimates are available based on the data supplied to the National Tax and Customs Administration of Hungary pursuant to the Council Directive 2003/48/EC by countries disclosing information on the annual interest income of Hungarian private persons.⁸

4. Current transfers

Current transfers directly affect the level of disposable income and thus consumption. Transfers may be made in cash or in kind. As a rule, current transfers are made regularly for small amounts. All unrequited transfers that are not capital transfers are to be recorded as current transfers.

Data on the current transfers 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 unrequited current or capital transfer income. Since then, however, we have adopted accrual accounting; therefore transfers are recorded at the time of their use as unrequited (current or capital) transfers. 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.

Under its revision policy, the HCSO considers transfers 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.

II. *Capital account*

⁸ savings directive <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:157:0038:0048:en:PDF>

The capital account, a sub-division of accumulation accounts, is clearly distinguished from the current account. It covers capital transfers as well as revenues and expenses related to acquisitions and disposals of non-produced, non-financial assets. Transfers to and from the European Union are recorded as current and capital transfers in the balance of payments.

5. 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.

6. Acquisition of disposal of non-produced, non-financial assets

An item for recording transactions relating to the change of ownership of intangible assets.

The data source is direct reporting to the MNB by economic entities with external economic relations.

III. *Financial account*

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 equal to the balance of the financial account, including international reserves, with the opposite sign.

In other words, the reserves are part of the financial account on the one hand, while in terms of presentation they are generally shown outside the total balance of payments, as evident in our tables. 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, there is a need to borrow or to resort to reserve assets.

Under the balance of payments methodology, international 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 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.⁹

⁹ With the exception of the separate presentation of income on international reserve assets, which is introduced as a supplementary item only in BPM6.

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

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

7. Direct investment

Direct investment is a category of investment associated with a natural or legal person resident in one economy having a long-term interest and a significant degree of influence on the management of an enterprise that is resident in another economy.

For *equity capital* within direct investment, the transaction data are obtained from monthly and quarterly questionnaires, stock data from yearly questionnaires¹⁰. For *other capital*, flow and stock data are derived from monthly and quarterly questionnaires. Enterprises are added to the sample of respondents to the quarterly and yearly questionnaires based on a threshold.

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

In case of the direct investments of non-residents in Hungary in the form of equity and reinvested earnings, we supplemented the questionnaire data with the data of enterprises in which, according to the corporate income tax return database, the ownership of non-residents was at or above 10% and the enterprise submitted no yearly questionnaire. In the balance of payments statistics only in the case of direct investment equity in Hungary an external data base is available that allows grossing up.

For direct investments, classification is based primarily on the direction of investment rather than an asset/liability breakdown. Accordingly, we present direct investment in an inward/outward breakdown, further detailed by equity capital, reinvested earnings and other capital.¹¹

Equity capital:

- *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.
- *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.

Since 2008, transactions between non-resident investors are also recorded (as a stock increase for one investor and a stock decrease for the other).

¹⁰ In the interim periods during the year and until the publication of the yearly questionnaires (t+9 months) stocks are derived as the sum of the stock data from the previous year and of monthly transaction, revaluation and other change in stock data.

¹¹ Because of the special interest by users, statistics on direct investments, in different breakdowns and frequencies, are collected on a separate page on the MNB website, at the following link:

http://english.mnb.hu/Statiztika/data-and-information/mnben_statiztikai_idosorok/mnben_elv_external_trade/mnben_kozetlen_tokebef

Within the balance of payments statistics, special purpose entities (SPEs) have the strongest impact on the instruments of direct investments, therefore data are disclosed both including and excluding special purpose entities. SPEs are discussed in more detail in the subsection on Special methodological issues.

Reinvested 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.¹²

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

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.

In accordance with international methodology guidelines, the activity breakdown of published direct investment data shows the *activity of the resident party under transactions*, that is, it indicates the activity of the investment enterprise for inward direct investment and the activity of the investor for outward direct investment. In the case of stocks, the activity breakdown indicates the *activity of the investment*, that is, the activity of the resident investment enterprise for inward direct investment (similarly to flows) while for outward direct investment, it indicates the activity of the non-resident direct investment enterprise. That means that the activity breakdowns of flows and stocks are not comparable in the case of outward direct investment.¹³

Other capital:

In accordance with the international methodology, all acquisitions of 10 percent or more of ownership constitute direct investment. If this investment relationship exists, in addition to the initial equity transaction between the investor and the enterprise, all other debt and financing transactions are also recorded under this item (other capital) in the balance of payments statistics. Accordingly, other capital transactions that are related to debt-type financial instruments even if do not necessarily represent long-term financial resources for the enterprise must also be recorded as direct investment, including even short-term funds (cash-pooling, zero balancing) as part of daily intragroup cash settlements. That is, the *other capital instrument* includes non-equity assets and liabilities vis a vis the direct investor/direct investment enterprise and other group members in direct and indirect ownership relationship as well.

Since 1995, other capital data has contained other, non-equity-related debt relationships between the parent and the subsidiaries.¹⁴ Since 2002, financial transactions vis a vis clearing centres within an enterprise group have also been recorded as direct investment other capital.¹⁵ Since 2008, other intragroup assets and liabilities relating to group members have been recorded fully in this category. Within other capital, there are assets and liabilities due to dividends; credits; intercompany accounts, cash pool; trade credits; debt securities; as well as other assets and liabilities including the ones relating

¹² BPM6 makes a distinction between the concepts of *reinvested earnings* in the income account and the *reinvestment of earnings*, the "other leg" of the transaction in the financial account.

¹³ This international requirement results from the limited availability of data as many countries are unable to collect data on the activity of the non-resident party for transactions.

¹⁴ Prior to that date, only transactions relating to the acquisition of equity were recorded as direct investment, while intercompany lending was disclosed under medium and long term capital.

¹⁵ Previously these transactions and the related stocks had been recorded under other investment.

to capital paid up but not registered. Of the aforesaid instruments, trade credits within direct investments have been recorded only since 2008. 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.

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,
- if the reporting entity 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, other capital was 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. Since the introduction of the new data collection system in 2008, other capital stock information has also been reported by data suppliers, thus country and activity breakdowns can be generated.

8. Portfolio investment

The equity securities line contains shares and equity participations below the 10% threshold and, irrespective of their percentage, investment units. Securities with original maturity of more than one year are recorded under bonds and notes, debt securities with maturities of one year or less among money market instruments.

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, by instrument, 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 resident owners. Transactions are calculated from changes in stock, after adjustment for price and exchange rate fluctuations.

Published data are generated with the help of the report supplementing the data extracted from the securities statistics system. Bills and unsecuritised equity participations below the 10% ownership threshold 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 receivables reported by resident custodians, therefore the stocks and flows of securities in custody abroad are estimated.

Simultaneously with the publication of September 2011, the liability positions and transactions within portfolio investments were changed in respect of the period between 2008 and 2010 as Hungarian government bonds, discount T-bills, bank and corporate shares underlying repurchase agreements and securities lending transactions are now attributed to their economic owner rather than their custodian holder. Previously, portfolio investment figures, with the exception of the MNB and the government sector, included stocks and flows relating to securities temporarily changing ownership under repurchase agreements or securities lending arrangements.

9. Derivatives

In the case of derivatives, the balances of positive and negative positions (assets and liabilities) are shown separately, in a four-sector 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.

10. Other investment

Other investment contains transactions conducted with financial instruments not listed under direct investment, portfolio investment or international reserves, by original maturity of one year or less (short-term) and over one year (long-term).

The data source is direct reporting to the MNB by economic entities with external economic relations. From 2008 on, the deposit assets with maturity of one year or less of other sectors on non-residents have included the transactions calculated from the aggregate balance sheet data of investment funds excluding money market funds (F04 report).

In the case of households, the data available is estimated using the data on the loan and deposit stock of Hungarian households in the monetary statistics of foreign central banks.

In the pre-2008 data, the transactions of non-financial corporations with fellow enterprises are included in other investment. Since 2008, these figures have been shown under direct investment.

Other investment assets include cash (currency holdings), cash (settlement) accounts held at non-resident institutions, deposits with non-resident banks, loans to non-residents including financial leases and repurchase agreements, trade credits (prepayments and advances to non-resident suppliers and deliveries with deferred payment to non-resident buyers) and other assets (funds in transit, participations below 10% in international organisations, trade credit liability with a negative value).

Other investment liabilities include cash (settlement) accounts held for non-residents, deposits of non-residents, borrowings from non-residents including financial leases and repurchase agreements, trade credits (prepayments and advances by non-resident buyers and import acquisitions with deferred payment) and other liabilities (funds in transit, trade credit receivables with a negative value).

IV. *Net errors and omissions*

In practice, BoP statistics cannot rely on observations of individual business transactions. The item 'Net Errors and Omissions' includes the statistical discrepancy that arises in the balance of payments due to using different data sources (incorporating direct reports, HCSO and securities statistics) and occasionally aggregated data. The item is intended to create conformity with the double-entry accounting convention, i.e. the identity of the credit and debit sides, at the level of the balance of payments.

International reserves

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,
- various liquid foreign exchange receivables (currency, current account, liquid deposits, securities, etc.),
- SDR holdings,
- reserve position in the IMF.

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 balance of the transactions is the figure directly reported by the MNB. Both gold and securities are published at market value.