

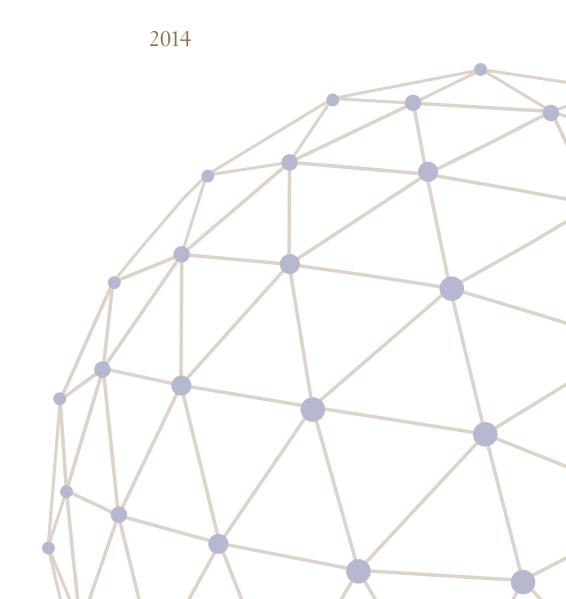
# Hungary's balance of payments and international investment position statistics

2014





# Hungary's balance of payments and international investment position statistics (revised international methodology and national practice)



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# Introduction

The Magyar Nemzeti Bank's Statistics Directorate is now publishing Hungary's Balance of Payments and International Investment Position Statistics (hereinafter the Publication) for the third time, to provide information to a wide range of users on the international methodology of the balance of payments and international investment position statistics and to explain the method of compilation of these statistics in Hungary. The reason for the updated release of the Publication within such a short period is that, in the European Union Member States, the changeover to the new statistical methodology which better reflects the current developments of the world economy (such as the spread of globalisation, the increased role of multinational corporations, free flow of capital, etc.) took place in 2014. The joint BPM6 changeover date within the EU was also coordinated with the implementation date of the new European System of Accounts (ESA 2010), which was revised in line with the new System of National Accounts (SNA 2008).

This Publication presents and explains the key concepts and conventions relating to the balance of payments and international investment position statistics as well as the structure of statistical reports and the conventions applied in their compilation. The explanation of the relationship with the system of national accounts is of fundamental importance for understanding the system of macroeconomic statistics and in particular understanding the role of balance of payments statistics. Implementation of the new methodology has changed the structure of the balance of payments statistics in such a manner that the applied conceptual framework has been brought even closer to the system of national accounts. This is also manifest in renaming the major subaccounts (usage of primary income and secondary income in the balance of payments, as opposed to the former terms of income and current transfers), and the integration of the balancing items (net lending/net borrowing) into the standard structure. Chapter 1 focuses on the presentation of the international methodology.

In addition to presenting the international methodology, the MNB also wishes this Publication to present the national practice applied in the compilation of external accounts statistics. As part of that, in Chapter 2 we deal with Hungary's specialities in terms of the system of data collection, processing and release.

The MNB website always discloses the most recent balance of payments and international investment position figures; therefore there is no annex to this Publication devoted specifically to statistical figures. However, the effect of the BPM6 changeover on the major aggregates is presented in Chapter 3.

Similarly to the previous edition in 2012, there is a special annex containing the complete list of monthly, quarterly and yearly reports to feed into the compilation of the balance of payments statistics. According to the accounting under the new methodology, we also updated the Appendix, where interested users can follow specific examples for monitoring the technical steps related to the statistical treatment of individual transactions. At the end of the Publication there is a section with brief explanations of the key special terms and a list of useful references to outside sources.

The various chapters of the publication were written by staff members of Magyar Nemzeti Bank Statistical Directorate working on balance of payments and international investment position statistics, namely: Péter Bánhegyi, Mihály Durucskó, Magdolna Kanyóné Pető, Beáta Montvai, Vanda Simonné Tánczos and Erika Veitzné Kenyeres, while the data available on the MNB website were compiled by János Basa, Gyöngyi Lipcsei and Dóra Bräutigam. The Publication was authorised by Director Ágnes Tardos.

# **List of abbreviations**

Acronym	English meaning
BD	Benchmark Definition of Foreign Direct Investment
ВОР	Balance of Payments
ВОРСОМ	Committee on Balance of Payments Statistics
BPM5	Balance of Payments Manual Fifth Edition
врм6	Balance of Payments and International Investment Position Manual Sixth Edition
c.i.f.	cost, insurance and freight
COPC	Current operating performance concept
EGR	EuroGroups Register
ESA	European System of Accounts
Extrastat	Extrastat
f.o.b.	free on board
FDI	Foreign direct investment
FDIR	Framework of Direct Investment Relationships
FISIM	Financial intermediation services indirectly measured
IIP	International Investment Position
Intrastat	Intrastat
NEO	Net errors and omissions
SDDS	Special Data Dissemination Standard
SNA	System of National Accounts
SPE/SCV	Special Purpose Entity
TÁSA	Corporate Tax Declaration

# 1 Overview of international methodology

#### 1.1 KEY CONCEPTS AND ACCOUNTING FRAMEWORK OF THE BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION STATISTICS

The balance of payments (BOP) is a flow-oriented statistical statement for recording economic and financial transactions between resident and non-resident institutional units of a country in a given period of time. Closely related to the flow-oriented balance of payments is the stock-oriented international investment position (IIP), which is a summary of statistical information on the stock of financial assets and liabilities vis-à-vis non-residents. The value of stocks may change between two reference dates due to transactions, revaluations resulting from changes in exchange rates and in the market prices of instruments or as a result of other changes in stock. The net worth of a country consists of the entirety of nonfinancial assets on the one hand and the net external financial position on the other hand, the latter being the difference between financial claims (+ gold bullion held as reserve assets) on and liabilities to the rest of the world. The net external financial position is presented in the international investment position. Balance of payments and international investment position statistics provide for the coherent recording of the transactions and financial positions of an economy vis-à-vis the rest of the world, portraying real economic and financial transactions from the perspective of the compiling country.

The concept of residence, in conformity with other macroeconomic statistics, is defined in the balance of payments statistics using the concepts of centre of predominant economic interest and economic territory. A resident of a given country is any natural or legal person or unincorporated entity whose centre of predominant economic interest (permanent residence, registered office, permanent establishment, production, etc.) is related to the economic territory of that country. Therefore, in statistical terms, the resident status of an economic unit in a given country depends on the existence of the centre of predominant economic interest rather than citizenship or nationality. From the perspective of an enterprise, this includes having a registered permanent establishment in the given country and engaging in economic activities there or, for new companies, intending to do so for at least one year.

Similarly to business accounting, the accounting framework of the balance of payments statistics is based on a series of conventions. One of the most important conventions is the principle of *double-entry bookkeeping*. Each recorded transaction is represented by two entries: the business event itself and the related financing, as a debit or credit entry, are recorded in the statistics (See Figure 1). In the overwhelming majority of transactions recorded in the balance of payments, nonfinancial or financial assets of a certain value change ownership in exchange for nonfinancial or financial assets of identical value. In case of financial assets, in addition to the change of ownership, the incurring of new claims and liabilities (e.g. bond issue) or their termination (e.g. debt repayment) or renewal with new conditions (e.g. amendment of maturity) by the contracting parties are also parts of the balance of payments. There are transactions when the counterparty gives nothing in exchange for the economic value supplied (e.g. food, medicine or investment aid). As the principle of double-entry bookkeeping is universally applied, the transactions related to these events must also be recorded in a two-sided arrangement. If no offsetting item is provided for a good, service or financial instrument, the missing 'financing' side of these unrequited transactions appears in the balance of payments as a transfer. If the unrequited transfer affects accumulation, it constitutes a capital transfer to be included in the capital account; otherwise it is a current transfer to be represented in the secondary income subaccount of the current account.

Figure 1
Convention of the double-entry system at the individual transaction level in balance of payments statistics

Credit (+) Debit (-)

export of goods and services inflow of income received unrequited transfers decrease in assets increase in liabilities import of goods and services outflow of income provided unrequited transfers increase in assets decrease in liabilities

Following from the principle of double-entry bookkeeping, on an aggregated level, i.e. on the level of the balance of payments as a whole, the sum of all credit entries (total inflows) is identical to the sum of all debit entries (total outflows), i.e. balance of payments statistics, by definition, have a zero balance. Put another way, theoretically, the sum of the balances of the current account, the capital account and the financial account is always zero.

In the balance of payments statistics, in the aggregate presentation the current account and the capital account contain gross flows, while in the financial account balances are provided instead of the flows (credit/debit) for each financial instrument: the net acquisition of financial assets and the net incurrence of financial liabilities. In the financial account of the published balance of payments statistics, this eliminates the consequence of the convention on signs (though it continues to apply on the transaction level) that signs indicate an increase or decrease depending on whether they are applied to assets or liabilities. The increase of financial assets and liabilities are presented with the '+' sign and their decrease with the '-' sign. Consequently, the balance of the financial account is equal to the aggregate balance of the current and capital accounts, which itself is the balancing item of net lending (+)/net borrowing (-), calculated from below and above, respectively.

#### Box 1

#### The sign convention on the level of individual transactions and aggregate presentation

The changeover to BPM6 has not resulted in any changes in the treatment of individual transactions; the treatment in accordance with the principle of double-entry book-keeping continues to apply as before: for every 'credit' (CR) item there is a related 'debit' (DR) item, in other words, there is an inflow for every outflow, or – in the framework of the balance of payments statistics interpretation – a financing transaction belongs to every underlying transaction. (See the example in the Appendix for the technical details of the recording of individual transactions). What has changed compared to the earlier practice is the way the individual items of the financial account are reported. The sign of items in the financial account has changed, and according to the new methodology, in the financial account, the sign of the balance of assets and liabilities will show their impact on the stocks. Thus, the balance of the individual financial instruments shows a change in net assets as the difference between the balance on assets and liabilities (as opposed to the change in net liabilities applied so far). This is exactly the opposite compared to the net liability-type content of the BPM5 balance of the financial account. Therefore, the balance of the financial account in BPM6 shows net lending/net borrowing exactly the same way as the combined sum of the current account and the capital account. Accordingly, for example, the positive sign of the data of the financial account means an increase in net assets, which equals a net decrease in external liabilities and the outflow of resources.

Compliance with the principle of having equal total debits and credits would only be possible if the balance of payments statistics were compiled on a transaction-by-transaction basis, in which case conformity with the principle of double-entry bookkeeping would be assured for each transaction. In practice, however, statistics are compiled from different data sources (reports from banks, companies, etc.). There can be differences between data sources in terms of valuation, timing and other aspects; furthermore, as a consequence of possible errors in recording, identity can only be accidental, thus reconciliation can only be subsequent and formal. This fact itself is independent of the features of the statistical information system, and it only expresses that real economic developments and their observation, unlike theory, are much too complex to facilitate the

acquisition of perfect and comprehensive information on each and every event. This is the reason why each country's balance of payments statistics include a line to reconcile the debit and credit sides, ex post and in formal terms, on the level of the balance of payments as a whole. This line is called 'net errors and omissions' (NEO). This balancing item may have either a positive or a negative sign depending on what is required to correct the statistical error. If the error is permanently in one direction or if its magnitude increases, this may be an indication of imperfections or errors in the data collection system.

When compiling international statistics, as the *uniform assessment of transactions*, the methodology considers the market price determined by the generally unrelated economic agents who participate in the transaction as the basis of recording. A transaction must be *recorded in statistics* when the ownership of the nonfinancial or financial asset is transferred between *residents and non-residents* and when the relevant claim or liability is created, extinguished, transferred, etc.

The change of ownership, involving nonfinancial and financial assets, between residents and non-residents as the main criterion for recording the transactions in the balance of payments statistics indicates that the balance of payments, as opposed to what its name would suggest, constitutes statistics on an *accrual basis*, rather than on a *cash basis*. The recording of a transaction and its timing is determined by the date of change of ownership (or in the case of services the date of use), rather than the time of payment of the countervalue.

It also follows from the above that settlement in a foreign currency is not a requirement for the inclusion of individual transactions in the balance of payments statistics; settlement can be in the national currency, under a barter arrangement or even without compensation. Nevertheless, most balance of payments transactions are in foreign currencies and claims on and liabilities to non-residents are denominated in various currencies. The aggregation of transactions and positions in the currency of compilation requires their conversion at an appropriate exchange rate. In the case of transactions, the rate of conversion is the exchange rate used in the transaction while in the case of positions it is the exchange rate prevailing at the reference date. In respect of flows, transaction exchange rates are often unavailable; in such instances the average exchange rate for the period is generally used.

#### 1.2 STRUCTURE OF THE BALANCE OF PAYMENTS

#### 1. Current account

- 1.A Goods and services
- 1.B. Primary income
- 1.C. Secondary income

#### 2. Capital account

- 2.1. Gross acquisition/disposals of non-produced, nonfinancial assets
- 2.2. Capital transfers

#### 3. Financial account

- 3.1. Direct investment
- 3.2. Portfolio investment
- 3.3. Financial derivatives and employee stock options
- 3.4. Other investment
- 3.5. Reserve assets

The two main components of the balance of payments are the current account and the capital account together, as well as the financial account. The balancing item of the current account and the capital account is the financing capacity calculated from above (or the borrowing requirement in the case of a negative sign), while the balance of the financial account is the financing capacity/borrowing requirement calculated from below. By definition, this equals the application of the net new borrowing/ net lending; however, this equality is rarely seen in practice, owing to the peculiarities of data collection. The financing capacity calculated from above shows – together with the current account balance and the balance of the capital account – the combined balance of goods and services, income and transfers received and paid. If that is negative, it means that an external financing requirement was generated, which requires the involvement of foreign resources, if it is positive, then in an international context the country is a net creditor. The components of the financial account provide a more detailed picture about the characteristic features of this financing: what the distribution of foreign direct investment, portfolio investment, other investment is, and how reserves have changed over a particular period.

#### 1.2.1 Current account

Current account is an important aggregate of the balance of payments, which includes goods, services, primary and secondary income.

According to the new methodology, the modified names of main categories of current account harmony with the system of national accounts has been made clear (e.g. categories of primary and secondary incomes, applied in the national accounts previously have been applied instead of the earlier categories of income, and current transfers, as well). As a result of this change, now taxes and subsidies on product and production are also recorded under primary income as opposed to BPM5, which treated them as current transfers.

#### Instruments of the current account (1.A+1.B+1.C)

#### 1. Current account (1.A+1.B+1.C)

#### 1.A.a. Goods

- 1.A.a.1. General merchandise on a BOP basis
- 1.A.a.2. Net exports of goods under merchanting
- 1.A.a.3. Nonmonetary gold

#### 1.A.b. Services

- 1.A.b.1. Manufacturing services on physical inputs owned by others
- 1.A.b.2. Maintenance and repair services 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.8. Charges for the use of intellectual property not included elsewhere
- 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.

#### 1.B Primary income

- 1.B.1. Compensation of employees
- 1.B.2. Investment income
- 1.B.2.1. Direct investment income
- 1.B.2.1.1. Income on equity and investment fund shares
- 1.B.2.1.1.1. Dividends and income withdrawal from quasi corporations
- 1.B.2.1.1.2. Reinvested earnings
- 1.B.2.1.2. Interest
- 1.B.2.2. Portfolio investment
- 1.B.2.2.1. Investment income on equity and investment fund shares
- 1.B.2.2.2. Interest
- 1.B.2.2.2.1. Short term
- 1.B.2.2.2.2. Long term
- 1.B.2.3. Other investment
- 1.B.2.4. Reserve assets
- 1.B.3 Other primary income

#### 1.C Secondary income

- 1.C.1. General government
- 1.C.2. Financial corporations, nonfinancial corporations, households, and HPISHs

Goods include general merchandise, net exports of goods under merchanting (in which the resident merchant purchases the goods outside the borders of the resident country, then sells them also outside the borders, without bringing them into the resident country), and the sale and purchase of nonmonetary gold, i.e. gold that is not part of international reserves. General merchandise transactions include all goods transactions between residents and non-residents that involve a change in ownership and belong to neither the other two goods categories, nor to those services that also involve movement of goods (travel, construction services, government services). This means that, in addition to simple sale and purchase transactions, factoryless production (where the principal is resident but all transactions are carried out abroad), imports of high value goods in private trade, financial leasing, goods procured by non-resident carriers in the resident country (and similarly goods procured by resident carriers abroad) and illegal transactions (smuggled goods, drugs, etc.) also form parts of this category. Although in case of financial leasing there is no change of ownership in a legal sense until the end of the lease term, in line with the economic substance of this transaction, however, when the leased goods are imported (or exported), there is an entry under goods, and, as a double entry, a financial liability (or asset) is recorded in the financial account. In the case of merchanting, acquisitions are presented as negative exports.

Goods trade in both directions is recorded at *market value*, on FOB terms, i.e. on exporting country's border delivery terms (see chapter 2.1.3.4 for details on CIF and FOB parity and settlement). Those elements of the invoice value that include transport, insurance or other costs above FOB terms must be reclassified under the relevant services category.

Every real economic activity that does not belong to goods is recorded as a *service*. The classification of services is generally linked to the **underlying activity**. Exceptions to that include **travel**, **government services and construction services**, **in these cases it is connected to the user of the service**. These latter categories of services may also include movements of goods; however, the main classification principle i.e. the activity itself overrides that as well.

Services also include movements of goods trade where no change of ownership occurs, even in the economic sense of the term. These transactions are manufacturing services on physical inputs owned by others (i.e. processing) and maintenance and repair services. Both must be recorded at net value. At the same time, in the case of processing those items where only the goods for processing cross the border of the resident economy and the processed goods, in the other direction, should not be reclassified under goods. Services also include assets which are results of **research and development**, regardless of whether one has to pay for their use only or for their ownership right (although the relevant service categories will be different). In the case of marketing assets (franchises, trademarks, logos, domain names, etc.), only charges for the use of intellectual property are classified as services; sale and purchase of ownership rights should be recorded in the capital account. Often the distinction between goods and services is difficult to draw. For example, a blank CD and a CD containing non-customised software are to be recorded as goods, while customised software belong to the category of computer and information services.

The sale and purchase of **financial assets** (such as loans, insurance, securities) also contain components of (indirect) services. The seller or marketer of these products manifests in its product prices the fact that it is not only the seller (marketer), but also the service provider of these assets. These **indirect services** must be recorded under insurance and financial services (*FISIM*, *i.*e. Financial Intermediation Services Indirectly Measured is a case for the latter). See Box 2 on the concept and accounting of FISIM.

#### Box 2

#### Financial Intermediation Services Indirectly Measured (FISIM)

The credit and deposit rates applied and actually paid by credit institutions include the effect of the **intermediation fees charged by the credit institution for financial intermediation.** This means that the interest payable on lending is increased by that amount, while the deposit rates paid by credit institutions are reduced by that amount compared to the reference rates of financial assets (i.e. their basic price). This financial intermediation fee, i.e. FISIM, represents the activity of financial institutions that they collect sources and then lend these to the appropriate customers, thereby providing services to non-financial institutions. Therefore, FISIM is to be recorded in the balance of payments among financial services, separately from interest.

It follows from the above definition that only the sector of financial institutions may realise revenue from FISIM and only non-financial institutions may incur FISIM expenses. At the same time, transactions including FISIM are only recorded under other investment, because the existence of FISIM itself expresses the fact that credit institutions provide intermediation services between independent parties, free of intra-group transfer pricing and settlement prices, and by definition, other intra-group claims and liabilities do not include FISIM. There is also no recording of FISIM transactions in the case of transactions of central banks, because these are not necessarily driven by profitability, i.e. by market considerations, and in the transactions of credit institutions conducted with each other (credit institutions cannot incur FISIM expenses, therefore we can presume that their transactions conducted with one another take place at reference rates).

#### An example for the partition of interests into FISIM (Financial Intermediation Services Indirectly Measured) and reference interest

- 1. The Bank of Eden (a FISIM producer) grants a, loan to a, non-resident automotive factory (a FISIM user) in the value of 100 million farthings with an annual interest rate of 6% (the reference rate is 5%).
- 2. A,non-resident automotive factory (FISIM user) places a,deposit at Bank of Eden in the value of 5 million farthings with an annual interest rate of 3% (the reference rate is 3.5%).
- 3. Some of the savings of the households of Eden, 3 million farthings, are placed at the non-resident Banque, with an annual interest rate of 4.5% (the reference rate is 5%).
- 4. The canning factory of Eden borrows 20 million farthings from non-resident Banque with an annual interest rate of 4% (the reference rate is 3.5%).

	Data in petak	
Yearly data	Credits	Debits
FISIM producers		
1. The total actual interest of lendings by resident credit institution	6,000,000	
1.a.pure interest	5,000,000	
1.b. FISIM	1,000,000	
2. The total actual interest of deposit placed with resident credit institution		150,000
2.a. pure interest		175,000
2.b. FISIM	25,000	
FISIM users		
3. The total actual interest of the deposits placed by resident households	135,000	
3.a. pure interest	150,000	
3.b. FISIM		15,000
4. The total actual interest of the borrowings of the resident company		800,000
4.a. pure interest		700,000
4.b. FISIM		100,000
Balance of Payments yearly data	Credits	Debits
1.A.b.7.1 FISIM	1,025,000	115,000
1.B.2.3.2. Interests (pure interests based on reference rate)	5,150,000	875,000
B.1. Deposit taking corporations except the central bank (S.122)	5,000,000	175,000
D.2. Non-financial corporations, households, and non-profit institutions serving households (S.1V)	150,000	700,000
TOTAL	6,175,000	990,000

The category of *travel* will be identified by a new name in Hungarian from 2014. The content of the recorded items has not changed (the total value of goods and services purchased by travellers for their own use during the trip), only the Hungarian name has been altered.

**Primary income** includes the revenues and expenditures related to the use of factors of production and financial assets, as well as taxes and subsidies on product and production.

Compensation of employees includes amounts received abroad by employees who are residents of the country compiling the balance of payments statistics or paid to non-resident employees in the compiling country, respectively. From a statistical aspect, the key issue is to determine whether an employee is to be considered resident or non-resident. With respect to natural persons, similarly to legal entities, resident status is determined based on the centre of predominant economic interest. This decision is not made on the basis of citizenship or permanent residence; instead, the key factor is the location where the natural person pursues the activity through which he/she earns a living (where he/she keeps a household). A natural person is resident in the country where he/she lives or works for a sufficient length of time, meaning at least one year for statistical purposes.

*Investment income* is recorded in the current account classified by form of investment. Balance of payments statistics classify investments and related incomes in a functional breakdown based on the motivation of the investor and the form of the investment.

Foreign direct investment income includes all incomes generated by foreign direct investments between residents and non-residents. The new methodology has clarified the foreign direct investment relationship, which is discussed in more detail in section 1.5.4. Income generated from loans between financial intermediaries is not part of foreign direct investment under the new methodology; these items must be recorded under portfolio or other investment. Foreign direct investment income can be split up into income of investment earned from ownership and interests earned from debt instruments. Income earned from ownership includes distributed income (dividend) and undistributed (reinvested) earnings.

Dividends are distributed earnings attributable to investors on their equity investments. Their amount is often determined as earnings per share. Income withdrawn from branches must also be recorded as dividend. At the same time, dividends of extraordinary amount, paid from retained earnings (superdividend) must be treated as a withdrawal of equity rather than as dividend, according to the recommendations of the methodology. Dividends must be recorded when the owners decide on their amount, that is, when they are declared. Equity income attributable to investors (after-tax profit, profit or loss of the corporation) is to be recorded as reinvested earnings in the balance of payments of the year when such income was actually earned. Declared dividends are deducted from the reinvested earnings of the period concerned. The treatment of after-tax corporate profits as reinvested earnings shows how direct investment affects the current account balance through income flows: income earned on foreign investments of Hungarians increases the balance of the current account, since it is attributable to Hungarian owners, while it is reduced by income earned on investments of non-residents in Hungary, since it is attributable to non-resident owners. As a result of the method of recording, the owners' decision on the dividend and the actual disbursement is already neutral on current account balance.

Income on *debt instruments* is income generated between enterprises involved in foreign direct investment relationship, by investments outside the scope of equity (such as inter-company loan, intra-group clearing account, cash pool, trade credits, etc.).

Portfolio investment income also consists of income from equity relationship and interest income related to debt securities. Income from equity relationship includes, on the one hand, income on shares held by investors outside a company group, representing a voting power of under 10 per cent, and on the other hand, income from mutual fund shares. As regards shareholding, only dividends should be recorded, reinvested earnings should not. However, in the case of mutual fund shares both distributed and undistributed income should be recorded according to the new methodology. By definition, interest income is generated on debt securities (bonds and notes, money market paper).

Other investment income includes income on investments not classified under two previous categories, but also resulting from both equity relationships and interest incomes on debt instruments. In the case of equity relationships, the voting power outside the company group remains below 10 per cent and is non-securitised (for example, in the case of actual power under 10 per cent held in one branch), while the debt instrument exists between enterprises not in a direct investment relationship and is

also non-securitised (bank deposits, bank loans). However, intra-group debt instruments between banks and other financial intermediaries are recorded under other investments, rather than under foreign direct investments, and interest income is recorded under other investment income. Furthermore, income from other investments includes income on stocks of actuarial reserves attributed by insurance corporations to their customers.

In the case of debt instruments classified under other investment, the service component indirectly included in interest income (*FISIM*) should not be recorded as interest income, but rather under financial services, i.e. accrual-based interests must be adjusted by this component. This service may only be provided by a credit institution, while its user may only be an economic agent outside of the credit institution.

Under the new methodology, *income on reserve assets* should be recorded under a separate category (income on assets constituting part of reserves), which may also be income from equity relationship (primarily on mutual fund shares) and interest income on debt instruments.

As the balance of payments statistics are accrual-based, income should also be recorded basically on an accrual basis rather than on a cash basis. As a consequence, investment income is taken into account as accruing on a continuous basis during the term of an investment, rather than when a payment is actually made. In the case of interest, only the accrued interest not yet paid attributable to the relevant period is recorded. Until the interest is actually paid, the same amount of increase in assets or liabilities under the relevant investment instrument should be recorded in the financial account. In the case of income from equity relationships, accrual-based recording should be applied to income on foreign direct investment and income on mutual fund shares under portfolio investment (reinvested earnings).

In addition to compensation of employees and investment income, *other primary income* includes taxes and subsidies on product and production plus rents receivable and payable for the use or exploitation of natural resources.

**Secondary income** includes flows related to the redistribution of income positions after real economic transactions and primary incomes, i.e. current transfers between residents and non-residents. These are transactions based not on exchange but rather on transfers between economic agents and affect disposable income. By this definition, these current transfers include taxes on income, social insurance contributions and benefits, aids and insurance premiums, current transfers of private individuals and various organisations, benefits payable to or received from international organisations, etc.

#### 1.2.2 Capital account

#### 2. Capital account (2.1+2.2)

- 2.1. Gross acquisitions/disposals of non-produced, nonfinancial assets
- 2.2. Capital transfers

**Capital account** includes acquisition and disposal of non-produced and nonfinancial assets plus capital transfers receivable and payable between residents and non-residents.

Transactions of **non-produced**, **nonfinancial assets** show acquisition and disposal of ownership rights of non-produced and nonfinancial assets. The scope of these goods includes the marketable exploitation rights of natural assets, marketing and other marketable assets (such as goodwill, contracts, licences, etc.). As discussed earlier, any transactions on intellectual properties related to produced assets is recorded under services, and fees related to the use of non-produced and nonfinancial assets are recorded partly under services, partly as primary income.

In contrast to secondary income, **capital transfers** are such transfers that do not affect the disposable income, but rather the disposable nonfinancial or financial assets. They may be transfers provided in kind or in money and cover wide areas: investment grants, transfer of title to capital assets, debt forgiveness, etc., but the payment of contribution to international organisations also belongs to this category.

#### 1.2.3 Financial account

#### 3. Financial account (3.1+3.2+3.3+3.4+3.5)

#### 3.1. Direct investment

- 3.1.k. Direct investment (Assets)
  - 3.1.1.k. Equity
    - 3.1.1.1.k. Equity other than reinvestment of earnings
    - 3.1.1.2.k. Reinvestment of earnings
  - 3.1.2.k. Debt instruments
- 3.1.t. Direct investment (Liabilities)
  - 3.1.1.t. Equity
    - 3.1.1.1.t. Equity other than reinvestment of earnings
    - 3.1.1.2.t. Reinvestment of earnings
  - 3.1.2.t. Debt instruments

#### 3.2. Portfolio investment

- 3.2.k Assets
  - 3.2.1.k Equity and investment fund shares
    - 3.2.1.1.k Equity securities
    - 3.2.1.2.k Investment fund shares
  - 3.2.2.k Debt securities
    - 3.2.2.1.k Short-term debt securities
    - 3.2.2.k Long-term debt securities
- 3.2.t Liabilities
  - 3.2.1.t Equity and investment fund shares
    - 3.2.1.1.t Equity securities
    - 3.2.1.2.t. Investment fund shares
  - 3.2.2.t Debt securities
    - 3.2.2.1.t Short-term debt securities
    - 3.2.2.2.t Long-term debt securities

#### 3.3. Financial derivatives and employee stock options

- 3.3.k. Assets
- 3.3.t. Liabilities

#### 3.4. Other investment

- 3.4.k Assets
- 3.4.k.r. Short-term debt
- 3.4.k.h. Long-term debt
  - 3.4.1.k Other equity
  - 3.4.2.k Currency and deposits
  - 3.4.3.k Loans
  - 3.4.4.k Insurance, pension schemes, and standardised guarantee schemes
  - 3.4.5.k Trade credits and advances
  - 3.4.6.k Other accounts receivable
- 3.4.t Liabilities
- 3.4.t.r. Short-term debt
- 3.4.t.h. Long-term debt
  - 3.4.1.t Other equity
  - 3.4.2.t Currency and deposits
  - 3.4.3.t Loans
  - 3.4.4.t Insurance, pension schemes, and standardised guarantee schemes
  - 3.4.5.t Trade credits and advances
  - 3.4.6.t Other accounts payable
  - 3.4.7.t SDRs

#### 3.5.c Reserve assets

3.5.1.k. Monetary gold

3.5.2.k. SDRs

3.5.3.k. Reserve position in the International Monetary Fund (RPF)

3.5.4.k. Currency and deposits

3.5.5.k. Securities

3.5.6.k. Other reserve assets

The **financial account** shows changes in financial assets and liabilities generated by transactions between residents and non-residents. The balance of these items, the net lending/net borrowing, theoretically equals the aggregate balance of current and capital accounts, in other words, the net financing capacity to non-residents. For example, if the net financing capability to non-residents is positive according to the balance of current capital accounts, then the resident economy has the same net financing capacity to non-residents upon financial account.

The classification of investments is based primarily on the motivation of investors and the form of investment in financial account. Accordingly, financial account includes the following functional categories: *direct investment, portfolio investment, financial derivatives* and *employee stock options, other investment* and *reserve assets* of the monetary authority. Within each category the primary breakdown is separation between assets and liabilities, and within that there are additional instruments.

Foreign direct investment includes those foreign investments where an investor resident in one country obtains long-term control or a significant degree of influence over a company resident in another country. The size and form of foreign direct investment is primarily determined by long-term strategic plans and ownership considerations, which often optimise investment and financing decisions on the level of an entire multinational company group. Long-term control or influence refers to the time horizon of the investment on the one hand and to the effective influence on the management of the enterprise established through the investment on the other hand. One of the important changes in the new methodology is a clearer, precise definition of the framework of the direct investment relationship. In that framework, the definition of an investment chain is based on the clarification of the role of control (over 50% of the votes) and influence (10% to 50% of the votes), as well as on the relationship with fellow enterprises (under 10% of the votes). The rate of voting power, as opposed to the rate of ownership, has become the criterion of the relationship. The framework also covers links between ownership chains. If one or more ownership chains originate from one investor, every enterprise in every chain is in a direct investment relationship with each other. The new methodology gives significantly greater emphasis to the recording of transactions and positions between fellow enterprises. There is more focus on the analysis of the balance sheet data of the company. Most of the changes are manifested in the presentation of data with more detailed and new breakdowns (e.g. by the presentation transactions/positions under equity in direct investment enterprises, reverse investment [an equity of under 10% in the parent company] and between fellow enterprises). The breakdown by assets and liabilities has been inserted into the standard presentation of the balance of payments statistics, while the presentation by directional principle has become supplementary.

Transactions affecting the ownership rate or the investment relationship may appear in two forms: as the reinvestment of income from the normal operating surplus of a direct investment enterprise, and as other transactions (such as purchase of shares, disinvestment, declaration of a superdividend, etc.).

Debt and other financing relationships besides equity relationships between the direct investor and the direct investment and those between fellow enterprises should also be recorded under foreign direct investments. These are fundamentally debt financial instruments, although they do not necessarily provide a long-term financing source. Their classification under foreign direct investments is justified by the fact that these economic agents are not independent enterprises, rather having a direct

<sup>&</sup>lt;sup>1</sup> If a dividend, which the company pays to its shareholders, is outstandingly high or higher than the normal operating surplus in the relevant period, under the BPM6 methodology, it should be recorded not as a dividend (current account), rather as disinvestment called a superdividend (financial account).

investment relationship with each other, therefore transactions between these parties may be subject to conditions other than fair market conditions. These transactions include loans between these enterprises, assets and liabilities due to dividends declared and paid, assets and liabilities resulting from cash pool and intercompany accounts, intragroup trade credits, debt securities as well as other assets and liabilities and should be recorded under debt instruments.

**Portfolio investment** also includes equity and debt instruments. Equity includes holding of shares representing voting power of under 10 per cent and mutual fund shares. Here, reinvested income should only be recorded under mutual fund shares. Debt instruments cover securitised credit relationships (bonds and money market instruments). Debt securities should be classified according to their original maturities.

Portfolio investment is characteristic of the largely anonymous relationship between the issuers and holders and the high degree of trading liquidity in the instruments recorded under this category.

**Financial derivatives and employee stock options** include the trading or realisation of a risk related to changes in price of a financial or nonfinancial instrument which itself becomes a separate financial asset. Transactions under derivatives may be recorded at any point of these deals and cannot be classified under either equity or debt instruments.

Financial derivatives are classified into two main categories: forward-type derivatives including swaps and option-type derivatives. In a forward-type contract the parties agree to exchange a specified quantity of an underlying item (real or financial) at an agreed price on a specified date. In certain swap contracts, the parties agree to exchange cash flows the values of which are based on the deviation from reference prices (interest rate or exchange rate) calculated in accordance with prearranged terms. At its inception, a forward type contract usually has zero value. This includes interest rate swaps, forward rate agreements (and various foreign exchange forward agreements). In an option-type derivative, in return for the payment of an option premium, the purchaser of the option acquires the right but not the obligation from the writer of the option to sell (put option) or buy (call option) a specified real or financial asset on or before a specified date. At its inception, the value of the option is equal to the premium specified in the contract (generally but not necessarily equal to the premium actually paid upon contracting). The significant difference between forward-type and option-type derivatives is that in the former case either party can be on the creditor or debtor side depending on changes in the price of the underlying item, while in the case of an option, the writer remains on the debtor and the buyer remains on the creditor side throughout the life of the contract.

In contrast with the above option, *employee stock options* do not have their own markets; they should rather be considered as a benefit provided by the employer. However, similarly to financial derivatives, their assessment and realisation depends on the development of the price of the underlying (usually financial) product.

Other investment includes investments not recorded under foreign direct investments and portfolio investments (also excluding foreign reserves which should be treated specially). These investments also include other equity and debt instruments. Non-securitised equity relationships with a voting power of less than 10 per cent should be recorded under other equity. Debt instruments include, among others, trade credits outside the company group, interbank loans, syndicated loans and currency and deposit transactions which are not recorded under international reserve assets. In the case of loans, maturity should be determined according to the remaining maturity. Assets and liabilities of banks and other financial intermediaries on/to their parents and subsidiaries should be included under other investment, rather than under direct investment.

Other investment includes debt vis-à-vis the IMF owing to SDR allocation through member states, indicating that SDR allocation recorded under international reserve assets means liabilities of the resident economy as well.

**International reserve assets** have key importance in the balance of payments and in the analysis of the external position. In the balance of payments methodology, reserve assets are liquid assets vis-à-vis non-residents *controlled by and readily available to monetary authorities*. These assets can be used directly to make payments in the case of payment difficulties, indirectly to ease financial pressure by intervention on foreign exchange markets to affect the currency exchange rate or for any other purposes. However, as demonstrated by the example of SDR, liabilities may be linked to the international reserve assets in other parts of the balance of payments, and these liabilities related to international reserve assets should be presented as supplementary information.

#### 1.3 INTERNATIONAL INVESTMENT POSITION

#### 3.1. Direct investment

- 3.1.1. Equity and investment fund shares
  - 3.1.1.1. Direct investor in direct investment enterprises
  - 3.1.1.2. Direct investment enterprises in direct investor (reverse investment)
  - 3.1.1.3. Between fellow enterprises
- 3.1.2. Debt instruments
  - 3.1.2.1. Direct investor in direct investment enterprises
  - 3.1.2.2. Direct investment enterprises in direct investor (reverse investment)
  - 3.1.2.3. Between fellow enterprises

#### 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
  - 3.2.2.2. Long-term

#### 3.3. Financial derivatives and employee stock options

#### 3.4. Other investment

- 3.4.1. Other equity
- 3.4.2. Currency and deposits
- 3.4.3. Loans
- 3.4.4. Insurance, pension and standardised guarantee schemes
- 3.4.5. Trade credits and advances
- 3.4.6. Other accounts receivable/payable
- 3.4.7. SDRs

#### 3.5. Reserve assets

- 3.5.1. Monetary gold
- 3.5.2. SDRs
- 3.5.3. Reserve position in the International Monetary Fund (RPF)
- 3.5.4. Currency and deposits
- 3.5.5. Securities
- 3.5.6. Other reserve assets

The *flow-based* balance of payments statistics are closely linked with the *stock-based* statistics on the international investment position. These two sets of statistics provide for a coherent recording of the transactions and positions of an economy vis-à-vis the rest of the world. International investment position shows at a certain *point in time* the value and composition of the stock of financial assets and liabilities of an economy vis-à-vis non-residents as well as components of changes since the previous period. The classification of the international investment position by financial instruments is identical to the classification of the financial account in the balance of payments and corresponds to the investment income categories in the current account. This assures the reconciliation of flow and stock data and the consistent accounting for the earnings on various investment categories. The difference between the two sides of the balance sheet, i.e. assets and liabilities, represents an economy's net position (*net assets or liabilities*) vis-à-vis non-residents, which equals the country's net worth resulting from financial investments vis-à-vis the rest of the world. Calculating without equity securities, equity investment and financial derivatives, this difference yields the net international creditor or debtor position.

In economic terms, *liabilities* and *debt* are not synonymous. According to the generally accepted definition, gross external debt includes those debts (obligations) of a country's residents vis-à-vis another country's residents that involve a repayment obligation (with or without the payment of interest) or, conversely, an interest payment obligation (with or without principal payment). Under this definition, equity investments are not considered debt, irrespective of recording them under foreign direct investments, portfolio investments or other investments. In addition, financial derivatives are also not considered debt based on this definition because at their inception there is no transfer of funds related to the instruments that would need to be repaid at a later date (no repayment obligation), and no interest accrues on them. The purpose of financial derivatives is not to provide funding to economic entities, but to facilitate risk management and risk trading. Financing with financial instruments linked with various types of equity and transactions with financial derivatives do not affect the country's net external debt, and therefore they are referred to as *non-debt generating financing*.

Between two points in time, changes in the stock are driven by (1) transactions shown in the financial account of the balance of payments, (2) *revaluation* (exchange rate changes, price changes), and (3) *other changes in volume* (e.g. write-offs). The value of stocks since may vary for reasons other than transactions or revaluation, including debt write-offs. Reclassification of certain items from one instrument to another to assure compliance with changed classification criteria should also be considered as other changes in stock. This occurs, for instance, when the 10 per cent threshold between direct investment and portfolio equity investment is exceeded. If an investor who was below this threshold in the previous period, makes additional investments and exceeds the limit in the next period, the transaction carried out in the reference period should be recorded under direct investment in the financial account (although retrospective adjustment is not required), whereas in the IIP, the stock recorded under portfolio investment in the preceding period should be reclassified as direct investment. Such reclassifications should be recorded under other changes in volume.

## 1.4 BALANCE OF PAYMENTS IN THE MACROECONOMIC STATISTICS FRAMEWORK, LINKS TO THE SYSTEM OF NATIONAL ACCOUNTS

This chapter explains how the balance of payments and the related international investment position form an integral and organic part of the broader system of national accounts.

The UN *System of National Accounts* (SNA), which is one of the most significant contributions of the 20<sup>th</sup> century to expanding the toolset of economic analysis, is the international set of standards that renders comparable the economic output of the individual countries through the system of national accounts of the various countries. The role of national accounts is to document the economic flows of a country in an integrated and consistent system. They cover aspects of the output of manufacturing and services, income creation and distribution, consumption and accumulation.

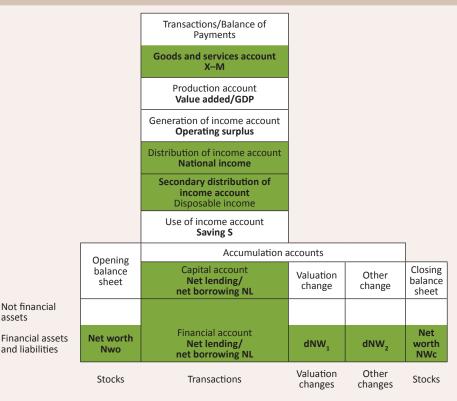
National accounts constitute a self-contained system of accounts presenting the macroeconomy through their interrelated and integrated accounts and statements. The system of national accounts consists of production accounts, accumulation accounts and balance sheets. The System of National Accounts draws up these accounts for the following sectors: resident sectors: within that nonfinancial corporations, financial corporations, general government, households, non-profit institutions serving households and non-residents, i.e. the rest of the world. The aggregation of these sectors shows the production, income and accumulation trends and the net worth of the total economy.

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. In English, the balance of payments and the international investment position are referred to as International Accounts.

Figure 2 presents the System of National Accounts. Accounts which have their counterparts in the BOP and IIP statistics are highlighted, and the balancing items of the various accounts are indicated in bold.

Figure 2

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** = gross 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

#### Relationships between national account aggregates and the balance of payments

On the production account of national accounts resources and uses are in equilibrium. This means an equilibrium between gross output and imports of goods and services on the one hand, and final and intermediate consumption, capital formation and export of goods and services on the other hand. Gross domestic product (GDP) is one of the most extensively used measures of economic performance defined as the difference of gross output and intermediate consumption (value added). At the same time, this measure is also an income category as it expresses a volume of income identical to 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 GDP is adjusted for the balance on primary income (BPI), the gross national income (GNI) is obtained.

If we focus on transactions involving the rest of the world, i.e. add to the net exports of goods and services the balance of primary and secondary income (net current transfers) with non-residents, we arrive at the current account balance (CAB).

Correlations between national account aggregates and the balance of payments			
Resource	=	Use	(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)

**GO** = gross output

IC = intermediate consumption

**C** = private consumption (household consumption)

CAB = current account balance

**G** = government consumption

**GDP** = gross domestic product

**GNI** = gross national income

A = domestic absorption

**GNDI** = gross national disposable income

I = gross domestic (nonfinancial) investment

M = import of goods and services

**BSI** = balance on secondary income

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

**NKT** = net capital transfers from abroad

**NPNNA** = net purchases of non-produced, nonfinancial assets

KAB = capital account balance

**BPI** = balance on primary income

**S** = gross saving

**X** = export of goods and services

(SH-IH) = net financial saving by households

(SE-IE) = net financial saving by corporations

(SG-IG) = net financial saving by government

The current account balance reflects the economy's saving 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 net external 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).

These equations express necessarily fulfilled *identities* following from the accounting principles rather than rules of conduct. Consequently, in themselves they are insufficient for the description of causality between macroeconomic aggregates. The establishment of causality between these variables is within the realm of economic analysis. However, by their very nature,

identities are instrumental in establishing consistence between the statistical data published and in the reconciliation of individual indicators when preparing projections.

#### 1.5 MAJOR CHANGES FROM THE PREVIOUS EDITION

In the 6th edition of the Balance of Payments and International Investment Position Manual of IMF most of the changes are conceptual and **methodological fine-tuning and clarification**; the amount of changes in the 6th edition is smaller compared to the 5th edition than the former change. The overall framework remained unchanged during the revision, whilst at the same time, significant changes did occur in certain areas.

The revision of BPM5 occurred in parallel with the updating of the system of national accounts methodology (SNA2008 replacing SNA1993) under the auspices of the UN and an update of the statistical methodology for direct investment (Benchmark Definition on Foreign Direct Investment) orchestrated by the OECD. It was a primary consideration to increase the harmony between the various macroeconomic statistics.

Compared to the earlier editions, the Manual has almost doubled in length due to the more detailed explanations and the larger number of appendices on special issues and topical summaries. The detailed list of changes is contained in <a href="Appendix 8">Appendix 8</a> of BPM6.

#### 1.5.1 Necessity of the new edition

The 5th edition of the balance of payments manual was published in 1993, and since then globalisation has progressed significantly: an increasing number of private individuals and companies are not related to a single country, but rather to multiple countries. In that context, the concept of resident also had to be clarified. The definition of residence is expressed as centre of predominant economic interest, replacing the former centre of economic interest. This facilitated a less controversial classification of 'multi-residence' households and enterprises. The classification of sectors and instruments has also been expanded.

In relation to globalisation, there is a higher level of interest in cross-border production processes and international labour migration related issues as well as special multi-economy corporate structures, and therefore more focus had to be concentrated on their statistical treatment: according to the new methodology, goods related to processing and merchanting are also recorded. The change relates to the more consistent approach of recognising transactions based on change in economic ownership, rather than a simple change in ownership. Thus, processing services must be recorded as services based on the value added (processing fee) while goods under merchanting must be treated as net goods exports (also registering the gross value as supplementary information). Under the new methodology, repairs are also recorded as a service rather than goods.

The content of cross-border transfers has been redefined – a new category is the concept of **personal transfer**: this is where the transfers of employees to their home countries are recorded. Personal transfers have been separated from institutional transfers. At the same time, transfers relating to migrants are no longer treated as transactions, but as other changes is stock.

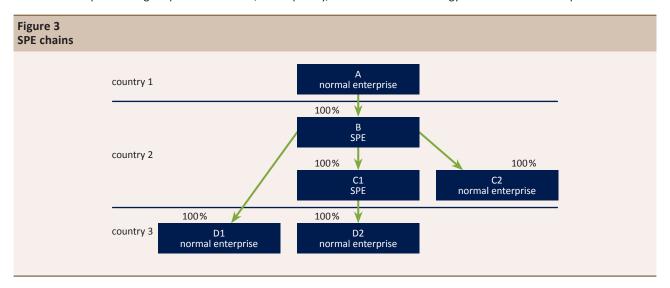
The **Framework for Foreign Direct Investment Relationship** has been expanded according to the globalisation focal points: the role of equity is replaced by controlling participation in voting power, while indirect voting power and the role of fellow enterprises are also considered with greater emphasis (for more details, see chapter 1.5.4).

The operation of multinational companies has become increasingly complex. Within multinational corporations, a special division of work functions may develop, thus **special purpose entities (SPE)** and organisational structures affecting several economies are established. It has become necessary to distinguish pass-through capital that has no effect on the individual economies, but distort statistics.

Chapter 2.1.3.1 contains more details on special purpose entities. Multinational corporations often establish special purpose subsidiaries in a country to conduct their internal and external direct investments through these (including a high volume of capital in transit), thereby taking advantage of the benefits provided by the local authorities (e.g. in taxation). These cross-border capital transactions, that make it easier for multinational corporations to finance their investments, constitute part of foreign direct investment, since the participating companies are part of the foreign direct investment relationships (FDIR), defined by the methodology. At the same time, these transactions practically pass through a country and do not cause the favourable

effects usually expected from foreign direct investment, since the destination country of the investment is a third country. Since these transactions distort the analysis of the foreign direct investment transactions and positions of the given country (the source and target of the investments are different from the direct partner), according to the new international methodological recommendations transactions and positions of resident special purpose entities should be treated separately, and the new methodology has made this a standard expectation.

It increases the complexity of the picture when **mixed groups are established within one multinational corporation in one country, from the SPE and non-SPE subsidiaries involved in different economic activities in the given country (see figure 3).** Therefore, the classification and distinction of capital flowing through the mixed group mentioned above is not clear, either. Moreover, **multinational corporations may also invest abroad through normal (non-SPE) companies**, and it is even more difficult to define these pass-through capital transactions; consequently, the relevant methodology will have to be developed in the future.



Special purpose entities often form a long chain running through several countries. In order to make it easier to conduct the analyses, *as voluntary data supply* it is allowed to provide the statistics created by filtering of all special purpose entities(resident and non-resident). In practice this means that in the breakdown according to country and economic activity, the first non-SPE partner must be taken into account when the statistics are compiled. This compilation is voluntary. Generally, in the case of the currently compiled statistics, it already represents a step forward if special purpose entities can be identified among the resident enterprises. Compilers of statistics (and even the resident reporting entity itself) usually has no information about whether the partner located in another country is an SPE or not, and if so, in what country the first non-SPE partner might be found. The persons compiling the statistics are only allowed to require data supply from resident companies. At the same time, from the aspect of analysis, it would be important to assess statistics that are able to look through all the special purpose entities (resident and non-resident) and only analyse investments made between companies engaged in actual economic activities.

In international methodology, efforts are also being made to find a way to determine the final **resource and purpose of investment**; practical implementation, however, is still in the research stage on this question as well. As voluntary data supply, for inward investment stocks it is possible to provide a breakdown according to the ultimate investor. An enhanced register is required which contains the shareholding chains of multinational corporations (but at least through the controlling chain all the way to the final investor). We plan to introduce this kind of breakdown in Hungary from September 2016. Determining the country of the final beneficiary is an even more difficult question, since here we should obtain information on the minority chains of ownership, which could be even more diverse; therefore in this matter even the definition of the concept is in the research stage.

The treatment of **round tripping** is related partially to the topic of capital in transit, when a domestic investor invests in his own country through a foreign country, usually also taking advantage of the benefits (e.g. tax breaks) provided by the local authorities. According to the international methodological recommendations, this type should also be represented separately. It is necessary to be able to identify the final investor for a definition: where the final investor is a resident and the direct investor is a non-resident, those investments belong to the category of round tripping. The complexity of the non-resident chains makes the identification/filtering out of round tripping more difficult, as illustrated by Figure 4.

Figure 4
Round-tripping capital with several affected companies which the capital touches upon when making its round trip, until it reaches the domestic economy

B1

B2

Routing economies

Or:

B1

B2

B3

Routing economies

A

A1

A2

C

Local economy

The greater importance of **international investment position statistics** is indicated by the reference to it in the title of the new Manual: Balance of Payments and International Investment Position Manual Sixth Edition (BPM6). The message is clear: to assess external economic and financial developments and the related risks as well as sustainability, it is no longer sufficient to consider transactions on their own; it is also necessary to analyse other components of change affecting the size of positions (revaluation, other changes in stock) as well as the position itself.

#### 1.5.2 Harmony with the national accounts

The new balance of payments methodology applies the SNA sectoral distribution and creates from these 4 main groups:

- A. Magyar Nemzeti 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. Other sectors (S.1P)
  - D.1. Financial corporations other than MFIs (S.12M)
  - D.2. Nonfinancial corporations, households and non-profit institutions serving households (S.1V)

#### The new balance of payments methodology applies the terminology of SNA

The structure of the balance of payments statistics has been modified in accordance with the system of national accounts by the implementation of the new BoP methodology concerning the adoption of the applied conceptual framework, in the modified names of the major subaccounts (e.g. the concepts of primary income, secondary income, already applied earlier in the national accounts, replacing the former distinction of income, current transfers), and by the application of new balancing items, such as net borrowing and net lending. Taxes and subsidies on product and production are classed as primary income while in BPM5 they were treated as current transfers. Therefore the GDP—GNI transition can be directly demonstrated based on the balance of

payments as well, since certain current transfer elements no longer have to be considered for the calculation. According to the new methodology, transactions related to the EU are also mainly recorded among primary income. Full harmonisation of the scope and classification of financial instruments (e.g. the recognition of pension entitlements and employee stock options as financial instruments) is accomplished, as well as the treatment of the difference between the sale price and bid price applied in the sale and purchase of securities and that of insurance and pension services.

As part of the methodological changes, the concept of Financial Intermediation Services Indirectly Measured (FISIM) is applied in the balance of payments, which has already been recorded in the national accounts as part of services. In the balance of payments, the debt-type prorated incomes of other investments must be broken down to applicable interest and indirectly measured financial service elements. The former must be recorded among services and the latter among income. **Box 2** has more information on the concept and accounting of FISIM.

The **settlement of intellectual property related transactions** has been clarified by the more detailed explanation of the various categories and clarification of the borderline between produced and non-produced nonfinancial assets. 'Products' of research and development (patents, know-how) are now treated as produced assets and are to be settled among services, as opposed to their treatment under BPM5.

In the context of harmonisation, the standard presentation (aggregate level) in the financial account has changed. Instead of flows (income/expenditure), balances are recorded on the two sides of the accounts: net acquisition of financial assets and net incurrence of liabilities. On the level of the standard presentation, this eliminates the consequence of the convention on signs (though it continues to apply on the transaction level) that signs indicate an increase or decrease depending on whether they are applied to assets or liabilities. Irrespective of whether it refers to assets or liabilities, an increase is always indicated by a '+' sign, a decrease by a '-' sign. Consequently, the balance of the financial account is equal to the aggregate balance of the current and capital accounts, which is the indicator of the balancing item net lending (+)/net borrowing (-), calculated from below and reference above, respectively.

#### 1.5.3 Changes in the classification of financial instruments

Financial assets and liabilities can be primarily classified into 3 broad groups, and the new instrument types created through financial innovation can also be assigned to these groups.

These are (1) shares and mutual fund shares, (2) debt instruments (3) others.

Shares may be quoted shares, unquoted shares and other equity.

The new methodology replaces bonds and money market instruments with short-term and long-term debt securities.

The concept of monetary gold has been clarified: the classification of gold bullion, allocated and non-allocated gold accounts has received more detailed explanation.

Employee stock option has also been recognised as a financial instrument.

SDR allocations become a debt instrument, thus it must be recorded as a liability, the creation (allocation) of SDR must be recorded as a transaction.

If the change in the financial instruments occurs owing to the change of resident status, then it must be recorded as other change in stocks.

#### 1.5.4 Significant changes in classification within functional categories

Since the previous edition, barriers to international capital movements have been removed, investors have created corporate structures of ever increasing complexity, and they employ efficient methods of governance, financing and fund management. They establish subsidiaries and allocate resources between countries to optimise the profitability of their investments. The

new methodology had to reflect these changes as well. The most important element of the new foreign direct investment methodology developed jointly under the guidance of OECD is a more clear definition and clarification of the **framework for foreign direct investment relationship.** When the chain of investments is defined, the focus is on the clarification of the **role of control (over 50% of the votes) and influence (10% to 50% of the votes), as well as the relationship with fellow enterprises (under 10% of the votes).** Voting power, as opposed to equity stake, has become the criterion of the relationship. The framework also covers links between ownership chains. If one or more ownership chains originate from one ultimate investor, each enterprise in each chain of control is in direct investment relationship. The new methodology gives significantly greater emphasis to the recognition of transactions and positions relating to fellow enterprises. There is more focus on the analysis of the balance sheet data of the company. Most of the changes are manifest in the more detailed presentation of data with new breakdowns (e.g. by the presentation of cross-equity holdings and transactions/positions between fellow enterprises on separate lines). The following breakdown on a gross asset and liability basis has been inserted into the standard presentation of the balance of payments statistics, while also presenting, as a supplement, a breakdown according to direction of investment.

The concept of the **local enterprise group**, which – during the compilation of direct investment statistics and if economically justified – allows for the consolidation of the resident affiliates of a multinational enterprise group, has been introduced.

**SDR allocation** is recorded as a liability (transaction), among other investments.

Other equity must be recorded not in foreign direct investment, but rather in other investment.

Reinvested earnings must be recorded for mutual funds as well.

Special rules have been created for special non-resident units established or controlled by the general government primarily used for fiscal purposes. The borrowing of a non-resident unit from abroad also entails an increase of the general government's total (imputed) liability to and equity in the borrowing unit. At the time the funds are passed to the government, both the government's liability and equity are reduced by the amount of the funds transferred. However, if a third party receives some of the funds, the reduction in equity must be imputed against a current or capital transfer to the unit. The special rules apply exclusively to entries between the government and a non-resident unit established or controlled by it. Transactions between the latter and any third party must be treated under the general rules.

#### 1.5.5 The structure of the new balance of payments manual

In total, BPM6 consists of 14 chapters and 9 appendices. The first six chapters (1-6) discuss the general topics relating to the system as a whole rather than to any specific subaccount.

Chapter 1: Introduction

Chapter 2: Overview of the Framework

Chapter 3: Accounting Principles

Chapter 4: Economic Territory, Units, Institutional Sectors and Residence

Chapter 5: Classifications of Financial Assets and Liabilities

Chapter 6: Functional Categories of Financial Assets

The next seven chapters (7-13) deal with the various subaccounts, while the last chapter (14) gives an overview of the analysis of data and macroeconomic correlations relating to the balance of payments. The sequence of chapters may be considered arbitrary and a different order could have been chosen; however, the first place of the international investment position is not incidental. The editors wished to emphasise the increased importance of the investment position since the publication of BPM5 in 1993.

Chapter 7: International Investment Position (IIP)

Chapter 8: Financial Account

Chapter 9: Other Changes in Financial Assets and Liabilities

Chapter 10: Goods and Services Account

Chapter 11: Primary Income Account

Chapter 12: Secondary Income Account

Chapter 13: Capital Account

Chapter 14: Selected Issues in Balance of Payments and International Investment Position Analysis

Most of the 9 appendices discuss in detail issues affecting more than one subaccount (e.g. currency unions, exceptional financing, direct investment), and the detailed listing of standard components (9) and changes from BPM5 (8) is also included among them.

Appendix 1: Exceptional Financing Transactions

Appendix 2: Debt Reorganisation and Related Transactions

Appendix 3: Regional Arrangements: Currency Unions, Economic Unions, and Other Regional Statements

Appendix 4: Statistics on the Activities of Multinational Enterprises

Appendix 5: Remittances

Appendix 6a: Topical Summary - Direct Investment Appendix 6b: Topical Summary – Financial Leases

Appendix 6c: Topical Summary – Insurance, Pension Schemes, and Standardised Guarantees

Appendix 7: Relationship of the SNA Accounts for the Rest of the World to the International Accounts

Appendix 8: Changes from BPM5

Appendix 9: Standard Components and Selected Other Items

# 2 National practice in Hungary

### 2.1 METHODOLOGY OF THE COMPILATION OF THE BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION STATISTICS

#### 2.1.1 General remarks

Hungary implements the new international methodology recommendations discussed in section 1 in the following method. In Hungary, the central bank is responsible for compiling the balance of payments and the international investment position and determining the amount of and changes in assets and liabilities vis-à-vis non-residents. For more than a decade, however, balance of payments statistics have been compiled in close cooperation with the Hungarian Central Statistical Office. The central bank uses statistical data on BOP instruments collected by the HCSO in several cases. 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).

The overall statutory framework for the collection of the data required for the statistics is established by the Central Bank Act (Act CXXXIX of 2013 on the Magyar Nemzeti Bank) and the Act on Statistics (Act XLVI of 1993). The annual reporting obligations are set out in the annually updated MNB Decree 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 the implementation of methodological alterations in statistical data collection as well. Since 2008, the Magyar Nemzeti Bank, in cooperation with the Hungarian Central Statistical Office, has implemented a new data collection system based on direct reporting for the compilation of balance of payments statistics.<sup>2</sup> Large companies reporting the full set of BOP and IIP statistics on a monthly basis, a sample of SMEs (based on a threshold) 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.

Minor changes had to be made in data collection for the implementation of the international methodology in 2014, as the processing procedures had to be modified and the publications had to be redesigned to meet the new information requirements.

<sup>&</sup>lt;sup>2</sup> 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.

Table 1 Division of labour between the HCSO and the MNB				
Balance of payments instruments	Financial and nonfinancial corporations	General 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	
Non-produced, nonfinancial assets	MNB			
Capital transfers	HCSO/MNB			
EU transfers in the entire balance of payments	HCSO			
Foreign direct investment – equity	MNB			
Foreign direct investment - debt instruments	MNB			
Portfolio investment	MNB			
Financial derivatives and employee stock options	MNB			
Other investment	MNB			
Reserve assets	MNB			

When the statistics are compiled, 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 forints 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 accordance with the methodology:

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

This standard sectoral breakdown is also what is contained in the publication:

- A. Magyar Nemzeti 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. Other sectors (S.1P)
  - D.1. Financial corporations other than MFIs (S.12M)
  - D.2. Nonfinancial 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 distorting effects of SPE figures (see chapter 2.1.3.1 for more detailed coverage of SPEs). According

to the recommendation of the international methodology, from 2014 the data applying to SPEs had to be separated in the individual countries.

Since September 2012, capital movements mainly shown among foreign direct investment and not directly affecting the external finance of the national economy and the so-called capital in transit transactions have been published in a separate table (see section 2.1.3.2. for more detailed information on capital in transit transactions).

The Magyar Nemzeti Bank joined the Special Data Dissemination Standard (SDDS) of the International Monetary Fund (SDDS)<sup>3</sup> in 1996, and in accordance with its requirements, the Bank releases metadata, a comprehensive methodology and a release calendar for the balance of payments (and the other macroeconomic statistical categories required in the standard).

# 2.1.2 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 once again presents the various instruments, but this time according to the Hungarian applied statistical practice. 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, and 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.

#### 2.1.2.1 The current account

#### I. The current account (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 (ones related to trade in goods and services), income arising from performance of work, investment income (income on equity and interest), compensation of employees, other primary income and secondary income. Every instrument is presented, broken down to credit, debit, balance.

#### 1.A. Goods and Services

1.A.a. Goods

1.A.b. Services

#### Goods

Within 1.A.a Goods, according to the international methodology, we present separately general merchandise transaction, reexport and nonmonetary gold. In addition to exports and imports of goods, general merchandise transaction covers fuel and other supplies procured by non-resident carriers in the country compiling the statistics (and similar goods procured by resident carriers abroad). In the case of re-exports, acquisitions are presented as negative exports.

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 (and foreign trade according to national accounts), the following adjustments are made by the HCSO before they are incorporated in the BoP (and the national accounts).

<sup>&</sup>lt;sup>3</sup> The Hungarian site of SDDS is available at: http://dsbb.imf.org/Pages/SDDS/DQAFBase.aspx?ctycode=HUN&catcode=BOP00

- 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 (for more on this, see section 2.1.3.4).
- Due to the nature of external trade data collection, in the vast majority of the cases the trade in goods relating to VAT registrations created in Hungary contains 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 parallel with that, trade data do not include value added recorded through VAT registration created by resident companies abroad, which belongs to the resident economy, thus it must be added to the balance of payments and the national accounts by an estimated adjustment. See section 2.1.3.3. for more details on adjustments related to VAT registration.
- 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).
- The trade data received from HCSO contain processing transaction, which is recorded among services. Therefore, we transfer this part of the trade data to services.

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 external trade figures reported. Of these, the item of intermediary trade is significant, but the so-called 'bunker' fuel in vehicles also belongs to this category.

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 accordance with the new methodology, the trade data received from HCSO also contain the estimated transaction of drug trafficking and contraband, furthermore, high value goods brought in private trade, which is recorded among goods, as opposed to 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. The MNB takes such revisions into account in its own publications 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
- 1.A.b.3. Transport
- 1.A.b.4. Travel
- 1.A.b.5. Construction services
- 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 not included elsewhere
- 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

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 in this case, too. The source of 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 estimation for the Schengen borders. The main data source for other services is the questionnaire completed by enterprises supplying and purchasing foreign trade services as well as administrative sources (e.g. for government and insurance services).

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.

Process work received in foreign trade merchandise transaction is recorded among services (see Manufacturing services on physical inputs owned by others). Under the new methodology, repairs are also recorded among services; previously they had been reported by HCSO also among the service figures, but under BPM5 they were reclassified to goods.

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 only contain explicitly stated transportation fees while as a result of the terms of goods trade, we also need to take into account implicit transportation fees. This 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.

Under the new methodology, the transaction of patents and trademarks arising as a result of R+D is recorded under services, within the category of other business services.

Similarly, financial intermediation services elements (FISIM) implicitly included in paid and received interest are included as a new element, where the seller is the sector of credit institutions and buyers are non-credit institution sectors. Accordingly, interest stated by the reporting entities contain the impact of FISIM. Considering the fact that non-credit institution reporting entities do not apply the intermediation fee of credit institutions, this cannot be determined directly. Calculation is performed at the level of the national economy, considering the breakdown of the reported data according to country, sector and currency.

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

In addition to all of the above, service data include the details of estimated prostitution 'services.'

High value goods imported in private trade are recorded under goods according to the new methodology, as opposed to travel.

#### 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 income, we distinguish between labour income (compensation of employees), investment income (income related to foreign direct investment, portfolio investment, other investment, furthermore, income related to reserve assets) and other kinds of primary income. Since 2004, income has been accounted on an accrual basis in the balance of payments statistics; previously, a cash basis of accounting was used.

#### Compensation of employees

Line 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, Labour Force Survey, compensation figures of countries included in the database of Eurostat, etc.). This is substantially higher than the values calculated in previous years based on cash flow data (which reflected only net income after tax).

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. Income from reserve assets

Income from foreign direct investment, portfolio investment income, other investment income and, as a new aspect, income from reserve assets are recorded as investment income.

#### **Direct investment income**

- 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

Income from foreign direct investment includes all income generated from a stock created as a result of foreign direct investments between residents and non-residents. Under the new methodology, the direct investment relationship has been more precisely defined; accordingly, when the chain of investments is defined the focus is on the clarification of the role of control (over 50% of the voting power) and influence (10% to 50% of the voting power), and the relationship with fellow enterprises (under 10% of the voting power) has also been regulated. Voting power has become the criterion of the foreign direct investment relationship, instead of the previous share in ownership. In addition to direct investment relationships between two enterprises that arise because one enterprise controls or influences the other, there are also direct investment relationships between two enterprises that do not control or influence each other, but are both under the control or influence of the same investor. The new methodology gives significantly greater emphasis to the recognition of transactions and positions relating to fellow enterprises. Among foreign direct investment income, from 2013 we record dividend on fellow enterprises below 10%, while reinvested earnings should only be recorded in the case at least 10% voting power.

Foreign direct investment income consists of income on equity and interest income related to debt instruments. Income on equity includes dividends and income withdrawn from branches, as well as reinvested income.

Dividends and income withdrawal from quasi-corporations

Dividends are distributed earnings allocated to the owners of equity. If withdrawals from branches can be presumed to be dividend-type income, and the reporting enterprise report them as dividends, we record these as dividends and not as equity withdrawals.

At the same time, outstanding(ly high) dividend payouts, which the company pays to its shareholders from retained earnings, or if the dividend is higher than expected in the regular course of business, it must be represented not as dividend, but rather as withdrawal of capital (superdividend).

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

In the publication tables, in the line *Dividends and income withdrawal from quasi-corporations*, the credit side of dividends shows dividends of resident investors received from abroad and dividend payable to non-resident investors on the debit side.

We will have data on dividends from the monthly and quarterly questionnaires, or in the case of entities that only report annually, from the annual data supply, which we extrapolate according to 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 outstanding balance between the positive or negative after tax profit and the dividend voted in the given period. Prior to the completion of the annual corporate reports, the balance of payments statistics contained an estimated figure for the after-tax profits.

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 recorded 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.

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 distribution of the level of reinvested earnings within the year often causes problems in interpreting the quarterly figure. The monthly/quarterly value of reinvested earnings equals the outstanding balance of the earnings from shares per one month/quarter, on the one hand, and the dividend declared payable in that month/quarter on the other hand. In terms of source, the income of equity investment (which equals the adjusted after tax earnings) is an annual figure; when we determine its distribution within the year, we assume that the earnings are generated roughly evenly. When assessing the earnings arising from investments of non-residents in Hungary, we use the seasonal distribution of GDP to calculate distribution, and in the investments of residents abroad we distribute the annual income evenly into quarterly and monthly figures. This means that one-twelfth/one-quarter part of the annual figure is allocated to each month/quarter. Dividends, however, must be recorded when they are declared payable. Since the majority of companies apply the regular business year, most of the general shareholder's meetings and votes on dividends take place in April and May, and therefore the overwhelming majority of dividends is paid in the second quarter. For that reason, in a quarterly breakdown the reinvested earnings always show a negative figure in the second quarter, which often confuses users. In this regard, we would emphasise that these reinvested earnings in the second quarter are only negative for technical reasons and do not have any 'negative' economic contents. What it means is that 'naturally' the dividends for the second quarter are higher than the income on equity for that quarter.

There are two concepts for the calculation of income on equity to measure corporate income: the concept taking all elements of profits, including, for example, foreign exchange gains or losses and losses from the write-off of assets (all-inclusive concept) and the concept excluding these elements and taking into account only profits from normal operations (current operating performance concept, COPC). Details can be found in section 2.1.3.5. Up to 2008, the all-inclusive concept was applied in the balance of payments statistics applied. The introduction of the corporate questionnaires collecting more detailed information in 2008 enabled the elimination of income components not related to current operations.

Reinvested earnings should only be recorded if the voting power of the direct investor is higher than 10%. Nonetheless, reinvested earnings do not have to be recorded concerning reverse investment or fellow enterprises.

Recording of income generated on the ownership chain (on indirect ownership)

Reinvested earnings must also include the reinvested income 'earned' on the indirect ownership as well, as we go along the ownership chain. In order to record reinvested income 'earned' on indirect ownership, the first step is record income earned on non-resident subsidiaries and allocate it to non-resident parent companies.

Earnings on indirect ownership is allocated to the non-resident parent company from the generated income of the non-resident subsidiary, reduced by dividends (interim dividends) disbursed. (The generated income must be reduced by dividends paid (interim dividends), because only the actually paid dividends (interim dividends) are realised by the parent company as income.) This indirect inward reinvested earnings are published together with inward reinvested earnings, as debit in the balance of payments statistics.

The COPC adjustment component of reinvested earnings is prepared on the basis of the annual corporate reports and the data of the corporate tax returns, by the end of September following the reference year, which we extrapolate based on the corporate tax returns. Until the end of September of the year following the reference year these components of equity income are estimated figures.

Interest income on debt instruments

Within direct investments, interest-type income on assets and liabilities is recorded continuously in the current account due to the accrual basis of 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, income generated from loans between financial intermediaries is not part of foreign direct investment; these items must be recorded under portfolio or other investment.

We record interest income according to the monthly and quarterly data supply.

## Portfolio investment income

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 fund 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

Portfolio investment income contains dividends on listed and unlisted shares outside a company group with an ownership interest below 10%, dividends on mutual fund shares and their reinvested income, as well as interest income arising from debt securities with an original maturity of less than one year and beyond one year, broken down to resident sector.

On the credit side, we record foreign securities owned by residents and on the debit side revenue from Hungarian securities owned by non-residents.

With the exception of bills, we obtain portfolio investment income figures from the securities statistics. Bills are observed through the data collection for the balance of payments using direct corporate questionnaires.

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

We record the prorated income of money market and other mutual fund shares as reinvested earnings. When dividends are paid out, we reduce the reinvested earnings by the amount of the dividends.

In the line of interest on debt securities with an original maturity not exceeding one year, we record treasury bills, short bonds, etc., formerly recorded as money market instruments, while under income from papers with a maturity exceeding one year we record accrual-based interests, formerly recorded in the bond lines.

#### Other investment

- 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 majority of investment income is constituted by interest earned on non-security receivables and interest expenses payable for the debts. Such interest-bearing instruments are various loans, deposits, current accounts.

It is here that we record earnings arising from investments below 10% outside the company group, not incorporated in securities, along with earnings of owners participating in pension and standardised guarantee systems.

We record accrual-based interest without charges of Financial Intermediation Services Indirectly Measured (FISIM), but in a separate table we record this amount broken down to resident sector as well as the entire accrual-based interest. In Box 2 we provide an example for the recognition of FISIM.

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

Household income or expenditure data are compiled based on the data supplied by the individual central banks and BIS, furthermore, by countries disclosing information on the annual interest income of Hungarian private persons to the National Tax and Customs Administration of Hungary pursuant to Council Directive 2003/48/EC.

#### **Reserve assets**

1.B.2.4. Income arising from reserve assets reflect the accrual-based interest income of all central bank reserve assets.

#### 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

Of the former current transfers, some of the EU transfers were moved here, as well as the taxes and subsidies on products and production and certain forms of rent. These rents are income payable to the owner of natural assets (land, fishing rights, forest, pasture, river water), arising from the provision of the natural asset for a short period of time. See section 2.1.3.6. for more details on European Union transfers.

# 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 entitlements

Secondary income directly affects the level of disposable income and thus consumption. It may take the form of cash or in kind. As a rule, secondary income is made regularly for small amounts.

Data on the secondary income 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 with data from the direct corporate reports to be included in the balance of payments.

Until September 2009, 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 credit. Since then, however, we have adopted accrual accounting, which means that EU transfers are recorded at the time of their use. Accrual accounting was applied retroactively on the data back to 2004. Another significant change impacts on the sectoral breakdown of data: EU transfers need to be recorded directly as the revenue of the final beneficiary. This also applies to transfers received from the European Union, recorded under primary income.

Under its revision policy, the HCSO considers secondary income 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.

# 2.1.2.2 Capital account

- 2. Capital account (2.1+2.2)
  - 2.1. Gross acquisition/disposal of non-produced, nonfinancial 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, nonfinancial 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.

#### Acquisition/disposal of non-produced, nonfinancial assets

This item is for recording transactions relating to the change of ownership of intangible assets (natural assets, contracts, leasing contracts, licenses, marketing assets and goodwill). The most important change compared to the earlier methodology is that the sale and purchase of intellectual property rights (patents and copyright, etc.) is no longer recorded here, as it has been moved to the appropriate service category.

The data source is direct reporting to the MNB by economic entities with external economic relations. The standard revision policy of the MNB for the balance of payments statistics is applicable to these data, which is explained in detail in Section 2.3.3.

#### **Capital transfers**

Capital transfers are investment grants, fixed assets provided free of charge as well as debt forgiveness based on mutual agreement between debtor and creditor. A capital transfer changes the stock of nonfinancial 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. The information recorded here and related to EU transfers is detailed under the section titled Secondary income.

A significant part of the capital transfer data is provided by HCSO to the MNB, and its revision policy is somewhat different than the general revision policy of the MNB. The annual data is revised in March and September owing to the compilation of the ED report, and general revision is permitted for 3 years. The quarterly data concerning the quarters of the reference year may be revised retrospectively in each quarter; these may take place owing to new, more accurate information or error correction.

In addition, ad hoc or large revisions may also take place upon the introduction of new methodological standards, concept, new classifications, etc.; these are not subject to any frequency or periodical limitation.

#### 2.1.2.3 The financial account and the international investment position

# 3. 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

On the one hand, 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, and, on the one hand, what financial instruments finance its deficit (net borrowing). Accordingly, the financial account contains capital transactions in a functional breakdown, i.e. it shows transactions relating to direct investment, portfolio investment, financial derivatives and employee stock options, other investment and reserves separately. The combined surplus/deficit of the current and capital accounts is theoretically equal to the balance of the financial account; in practice the difference between them is the NEO.

This is because the financial account also 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 (i.e. the financing capacity is negative, borrowing is required), then based on the financial account, the resident economy takes out a loan from non-residents (the net claim of one – or possibly several – financial instruments must be reduced, or the reserve assets must be utilised). Otherwise, if the net

financing capacity to non-residents is positive according to the balance of the current account and the capital account, then based on the financial account the resident economy has lent the same amount in loans to non-residents.

In the balance of payments methodology, reserve assets are liquid assets controlled by and readily available to the monetary authority: 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. (This process is clearly illustrated in the example found in the Appendix, which takes the reader through the compilation of the balance of payments for a period.)

The structure of the **international investment position** by financial instrument is identical to the structure of the financial account and 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. foreign direct investment (equity, debt instruments)
- 2. portfolio investment (equity, debt securities)
- 3. financial derivatives and employee stock options,
- 4. other investment broken down by original maturity,
- 5. reserve assets (of which monetary gold).

The source of the data of instruments in the financial account is the questionnaires stipulated by the MNB; therefore, in respect of the instruments in the financial account, the standard revision policy of the MNB for the balance of payments statistics is applicable. This policy is explained in section 2.3. Revision Policy.

#### **Direct investment**

One significant element of the methodological changes is a more clear, precise definition of the Framework for Foreign Direct Investment Relationship, with special regard to clarifying the role of control (voting power exceeding 50%) and influence (voting power of 10–50%) in the definition of the chain of investment and regulation of relationship with fellow enterprises (voting power below 10%). Voting power, as opposed to equity stake, has become the criterion of the direct investment relationship. The framework covers relationships between enterprises under the control of the same ultimate investor, but even possibly forming part of different chains, the enterprise group the enterprises of which are linked by direct investment relationships. The new methodology gives significantly greater emphasis to the recognition of transactions and positions relating to fellow enterprises and their separate presentation in publications. There is more focus on the utilisation of the balance sheet data of the company. One important difference is that voting rights below 10%, belonging to the company group are also recorded within direct investments (equity stake in fellow enterprises).

Most of the changes are manifest in a data presentation that is more detailed than earlier and contains new breakdowns (e.g. by the presentation on separate lines of equity in subsidiaries, cross-equity holdings [equity in the parent company] and transactions/positions between fellow enterprises). The following breakdown on a gross asset and liability basis has been inserted into the standard presentation of the balance of payments statistics, while also presenting, as a supplement, a breakdown according to direction of investment.

With regard to foreign direct investment, it is not possible to backdate the data of the new methodology, since it is not possible to backdate the existence of a given percentage of voting rights or to re-classify members of the company group retrospectively. Therefore, in these cases there may be a break in the time series.

#### Breakdown of foreign direct investment according to gross asset and liability:

#### 3.1. Direct investment, net assets

- 3.1.k. Direct investment, 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 fellow enterprises
    - 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 fellow enterprises
- 3.1.t. Direct investment, liabilities total
  - 3.1.1.t. Equity
    - 3.1.1.1.t. Share other than reinvestment of earnings
      - 3.1.1.1.t. Direct investor in direct investment enterprises
      - 3.1.1.2.t. Direct investment enterprises in direct investor
      - 3.1.1.3.t. Between fellow enterprises
    - 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 fellow enterprises

Accordingly, in the balance of payments, under foreign direct investment, the fundamental breakdown is according to gross asset and liability. In the breakdown according to gross asset and liability, all liabilities and all assets are aggregated. Additionally, the classification according to direction of investment will remain in our publications. The difference compared to the former practice is that – in respect of transactions and positions between fellow enterprises – those with non-resident final investors are recorded among investments of non-residents in Hungary, while those with a resident final investor are recorded among foreign investments by residents. The liabilities of fellow enterprises with no or unknown investors are recorded among Hungarian investments of non-residents, while their claims belong to the investments of residents abroad. In the breakdown by the direction of the investment cross-equity holdings and capital movements opposite the directions of investment reduce the volume of net investment.

# Breakdown according to the direction of direct investment:

## 3.1.ki Direct investment abroad

- 3.1.1.ki Equity
  - 3.1.1.1.ki Equity other than reinvestment of earnings, net 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 fellow enterprises (ultimate controlling parent is 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 fellow enterprises (ultimate controlling parent is resident)
  - 3.1.2.2.ki Debt instruments, liabilities
    - 3.1.2.1.1.ki Debt instruments Direct investor in direct investment enterprises
    - 3.1.2.1.2.ki Debt instruments Between fellow enterprises (ultimate controlling parent is resident)

#### 3.1.be Direct investment in Hungary

- 3.1.1.be Equity
  - 3.1.1.1.be Equity other than reinvestment of earnings, net 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 fellow enterprises (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 fellow enterprises (ultimate controlling parent is non-resident)
  - 3.1.2.2.be Debt instruments, liabilities
    - 3.1.2.1.1.be Debt instruments Direct investor in direct investment enterprises
    - 3.1.2.1.2.be Debt instruments Between fellow enterprises (ultimate controlling parent is non-resident)

The statistical distortion effects caused by globalisation affect direct investment the most, which should be separated according to the new methodological recommendations. Analysts working with data on direct investment are mainly interested in finding out what is the fresh capital inflow out of the investments recorded in the statistics, which will then serve to create new jobs, new knowledge (know-how) and expand the economy. However, as a result of globalisation there are more and more transactions that involve the transfer of capital from one country to another owing to a multinational corporation level optimisation or specialisation or some other aspect. It is also typical that in such capital transfers the boundary between equity investments and debt instruments is blurred. In many cases, equity investments arrive in the country and the capital continues its journey as a loan to another non-resident subsidiary. For that reason, from a certain aspect it may be more efficient to analyse the aggregate data and not the breakdown to instrument, because in the aggregate the capital transfers made between instrument are netted out.

From a statistical point of view, it is difficult to define and exactly identify new direct investment, as a driver of expansion of the economy. Consequently, the international methodology approach has started in the opposite direction: from the data of investments we try to identify every element that is known to be capital not affecting the Hungarian economy, and we declare that the rest are the closest to what we define as 'real' direct investment.

Among the parts to be treated separately, the **separation of the activities of special purpose entities (SPE)** is of primary importance (see section 2.1.3.1). Since 2006 in Hungary the MNB publishes the balance of payments statistics, and as a part of such, the direct investment figures both including and excluding SPEs. With implementation of the new methodology, each country has to report separately the transactions and positions of special purpose entities, and thus it will be easier compare the data of individual countries.

Capital in transit and asset portfolio restructuring (see section 2.1.3.2 for the detailed description) are two phenomena that cause distortion within the regular scope of companies, excluding SPEs. Large volume capital movements belong to this category that flow within a multinational corporation from one country to another without creating any economic effects in the country. In Hungary, owing to the small size of the Hungarian economy and the dimensions of some multinational corporations, the magnitude of the capital transfer transactions of these companies distort the data to such an extent that without separating them the published transaction cannot be interpreted. We publish capital in transit and asset portfolio realignment figures going back to 2008, as well as the direct investment figures with these filtered out.

Using the international methodological recommendations, we can identify **cross-border mergers and acquisitions** (M&A) as well, because these do not generate new capital either, but rather already existing direct investments will have new owners. Upon the implementation of the new methodology, so far the international institutions have been requesting data on a voluntary basis on cross-border mergers and acquisitions within the category of equity investment. Since 2008, transactions between non-resident investors are also recorded as transactions (as a stock increase for one investor and a stock decrease for the other), furthermore, we also record cross-border mergers as transactions; however, we have not identified these separately in the aggregate figure.

Equity capital (formerly share and other equity stake)

- The line *Direct investment abroad equity* contains 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. It is here that we publish acquisition of equity stake under 10% by a non-resident in a resident investor as well as its sale (cross-equity holdings). We will also record capital withdrawals owing to received superdividend in this line of the balance of payments.
- The line *Direct investment in Hungary equity* contains 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. It is here that we publish acquisition of equity stake under 10% by a Hungarian enterprise in a foreign investor, as well as its sale (cross-equity holdings). We will also record capital withdrawals owing to paid superdividend in this line of the balance of payments.

Real estate investments are recorded among equity investments, based on estimations. Debt forgiveness within the company group must also be recorded as foreign direct investment equity investments, while those outside the company group are as capital transfers.

Equity capital liabilities and assets are valued at market prices in the 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.

Equity transaction data are obtained from monthly and quarterly questionnaires, while stock data come from the annual questionnaire. Transactions are estimated based on the annual questionnaire as well.

In the case of equity stakes in the form of Foreign direct investment in Hungary, grossing up is applied according to the corporate tax return database (TÁSA), if the foreign ownership is at or above 10%, but the enterprise has not submitted an annual questionnaire. Concerning foreign direct investment by Hungarians we apply such a low threshold in the questionnaire<sup>4</sup> which practically means full-scale observation. However, it does not result in distortion that, for outward investment, we do not have any external data source that would enable us to gross up the data of the questionnaire. The stock generated due to indirect ownership is recorded under Foreign direct investment in Hungary – equity stakes.

#### Reinvestment of earnings

The value of *direct investment abroad reinvestment of earnings* in the financial account is identical to the recorded reinvested earnings as income credit in the current account, while the value of *direct investment in Hungary reinvested earnings* equals the reinvested earnings as income debit in the current account.

The reinvestment of earnings must only be recorded with voting rights of 10% or higher, and reinvested earnings do not have to be recorded in relationships between fellow enterprises or in the case of cross-equity holdings.

Depending on the nature of the adjustment, we record price changes on equity securities, exchange rate changes or other stock changes in an amount identical to the COPC adjustment to adjust the size of after-tax profits (see section 2.1.3.5. for details) contained in the reinvestment of earnings, but with an opposite sign.

#### Debt instruments

The content of the category remained the same as the description according to the old methodology: other capital (even earlier this category was popularly known as inter-company loans). The name indicates that in this case the transactions are debt type: i.e. they include loans, debt securities (no longer owner's loans only, but also loans between group members (within a company group) based on direct investment relationship). We also record the following items here: receivables from dividends, liabilities,

<sup>&</sup>lt;sup>4</sup> HUF 10 million.

short-term funds flowing within the company group subject to daily financial settlement (cash-pooling, zero balancing), trade credits, and including liabilities and receivables owing to capital paid but not subscribed.<sup>5</sup>

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 defined in an MNB regulation.

We apply the new methodology for the classification of assets and liabilities related to fellow enterprises to the individual directions of investment, depending on whether the final investor in the reporting entity is a resident or a non-resident.

If the final investor of the reporting entity

- is a non-resident, both assets and liabilities are recorded under direct investment in Hungary,;
- is a resident, both assets and liabilities are recorded under direct investment abroad;
- if the final investor is not known, assets are recorded under direct investment abroad, liabilities under direct investment in Hungary;

as instrument groups.

Prior to that, until 2013 we had identified the entities according to the resident status of not the final investor, rather that of the direct investor/investment: assets and liabilities relating to fellow enterprises had been classified by investment direction depending on whether the reporting entity has any non-resident direct investor (parent) or indirect investment abroad (subsidiary).

If the final investor of 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;
- 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, and 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 direct reports by the reporting entities in 2008, debt instrument type stock information has also been reported by data suppliers, and thus country and activity breakdowns can be generated.

In accordance with international methodology guidelines, the activity breakdown of published direct investment data according to the new methodology uniformly means – i.e. both for transactions and stocks – the breakdown of investments by activity (i.e. concerning investments by non-residents in Hungary classification is performed according to the activity of the Hungarian party, while concerning foreign investments by Hungarians the breakdown by sector is performed according to the activity of the foreign subsidiaries).

<sup>&</sup>lt;sup>5</sup> Expansion of the contents of debt instruments: Since 1995 these included other, 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 as direct investment other capital, and since 2008, other intragroup assets and liabilities relating to group members have been recorded fully in this category.

Since 2008, the assets and liabilities of banks and other financial intermediaries on/to their parents and subsidiaries have been included not under foreign direct investment, but rather under other investment, in accordance with the guidelines of 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 investment** includes securities traded on exchanges or other financial markets (excluding negotiable financial instruments recorded under direct investment and constituting reserve assets).

Among assets we record securities issued by non-residents, and among liabilities those issued by residents, regardless of whether they have been issued in the domestic or in the foreign market. In the publication the breakdown according to resident sector shows the owner of the securities asset or the issuer of the securities liability.

Those securities that change owners temporarily in the case of repurchase agreement type transactions are recorded at their economic owners instead of their deposit holders, i.e. in such cases we record loan asset/liability stock and transactions under other investments, as opposed to portfolio investments.

In the line Shares and investment fund shares we record quoted and unquoted shares under 10%, not held vis-à-vis the company group, as well as money market and non-money market fund shares/units, regardless of the percentage threshold.

We breakdown debt securities into short-term paper (e.g. treasury bills, short bonds) and long-term paper (e.g. bonds and notes, mortgage bonds) according to their original maturity.

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 are 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.

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

In the 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.

# Financial derivatives and employee stock options

#### 3.3. Financial derivatives and employee stock options

- 3.3.k Assets
- 3.3.t Liabilities

In the national accounts, the contents and the names of financial derivative instruments have been supplemented by employee stock options. In the case of the functional category of balance of payments financial derivatives, this change is reflected by the addition of employee stock options to the name. However, the practical significance of this change for the balance of payments is negligible.

In the case of derivatives, the balances of positive and negative positions (assets and liabilities) are shown separately, 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 has been available since 2008.

A transaction is recorded under financial derivative 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, and standardised guarantee schemes
- 3.4.5. Trade credit and advances
- 3.4.6. Other accounts receivable/payable
- 3.4.7. Special Drawing Rights (liability owing to SDR allocation)

Other investment includes financial instruments other than direct investment, portfolio investment or financial derivatives and employee stock options, and reserve assets. Data are broken down by resident sector.

Within other equity, intra-group equity under 10% is recorded under direct investment, while equity outside of the company group, not in the form of securities and participation in international organisations, is recorded under other investment.

Deposits, loans, trade credits and other receivables/payables are broken down by their original and remaining maturity into short-term and long-term categories.

Deposits include current accounts, time and other deposits, loans also include financial lease and repurchase agreements.

In the line Insurance, pension and standardised guarantees, introduced by the new methodology, the various insurance technical reserves, claims on and liabilities to pension funds, as well as reserves of standardised guarantees are recorded.

Trade credits and advances include deferred payments of goods and services, as well as prepayments and advance and progress payments. Assets include deferred payment related to export, prepayments and advance payments to suppliers, debts include deferred payments to suppliers, prepayments and advance payments of customers.

Under other accounts receivable/payable funds in transit other than goods and services, and claims and liabilities due to the accrual accounting of EU transfers are recorded.

Currency recorded in line 3.4.2. may only be recorded under assets, while 3.4.7. Special Drawing Rights (liability owing to SDR allocation) may only be recorded under liabilities.

The data source is direct reporting by economic entities with external economic relations, supplemented by various estimations. The deposit assets with maturity of one year or less are supplemented based on transactions calculated from the aggregate balance sheet data of investment funds excluding money market funds.

In the case of households, the data available 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. SDRs
- 3.5.3.k. Reserve position in the International Monetary Fund (RPF)
- 3.5.4.k. Currency and deposits
- 3.5.5.k. Securities
- 3.5.6.k. Other reserve assets

Reserve assets are liquid external assets of the central bank on non-residents that are readily available and controlled by the central bank for meeting balance of payments needs, for intervention in foreign exchange markets to influence the exchange rate of the national currency, or for any other purposes.

In accordance with the international methodology, reserve assets include

- monetary gold, within that gold bullions and non-allocated gold accounts,
- SDRs,
- reserve position in the IMF,
- various liquid foreign exchange assets (currency, current accounts, liquid deposits, securities and other claims to be classified as reserves).

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

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

In the case of observed data, transactions above the threshold assigned to the given instrument have been recorded.

#### 2.1.2.4 The statistical error

#### 4. Net errors and omissions (NEO)

In practice, statistics are compiled from different data sources (reports from banks, companies, etc.). There are differences between data sources in terms of valuation, timing and other aspects; furthermore, as a consequence of possible errors in recording, in reality the identity arising from the principle of double-entry bookkeeping between all credit and debit items can only be accidental, and thus reconciliation can only be subsequent and formal. This reflects the fact that real economic developments and their observation are much too complex to allow for the acquisition of perfect, comprehensive information on each and every event. This is the reason why each country's balance of payments statistics include a line to reconcile the

Table 2			
Sources of data			
Balance of payments instruments	Financial and nonfinancial enterprises	General government	Households
Goods	Observed/Extrapolated	Observed/Extrapolated	N.A.
Services	Observed/Extrapolated	Observed/Extrapolated	N.A.
Compensation of employees	Estimated	Estimated	Estimated
Direct investment income	Observed/Estimated/Extrapolated	N.A.	N.A.
Portfolio investment income	Observed	Observed	Observed/ Estimated
Other investment income	Observed/Estimated	Observed/Estimated	Estimated
Income from reserve assets	N.A.	Observed (MNB)	N.A.
Other primary income	Observed/Estimated	Observed/Estimated	N.A.
Secondary income	Observed/Estimated	Observed/Estimated	Observed/ Estimated
Non-produced, nonfinancial assets	Observed	N.A.	N.A.
Capital transfers	Observed	Observed	N.A.
Eu transfers in the entire balance of payments	Observed/Estimated	Observed/Estimated	Observed/ Estimated
Foreign direct investment - shares	Observed/Estimated/Extrapolated	N.A.	Estimated/N.A.
Foreign direct investment - other equity	Observed	N.A.	N.A.
Portfolio investment	Observed	Observed	Observed/ Estimated
Financial derivatives and employee stock options	Observed	Observed	N.A.
Other investment	Observed/Estimated	Observed/Estimated	Observed/ Estimated
Reserve assets	N.A.	Observed (MNB)	N.A.

debit and credit sides, ex post and in formal terms, on the level of the balance of payments as a whole. This line is called '*Net errors and omissions*' (NEO). This balancing item may have either a positive or a negative sign depending on what is required to correct the statistical error. If the error is permanently in one direction or if its magnitude increases, this may be an indication of imperfections or errors in the data collection system.

# 2.1.3 Methodology and special aspects of Hungarian practice

# 2.1.3.1 Treatment of Special Purpose Entities (SPEs) in the balance of payments statistics

Special purpose entities (SPEs) are resident enterprises that basically perform their activities abroad, and their connection with the domestic economy is minimal. They are primarily involved in the intra-group intermediation of financial resources, but their parent companies decide the direction and the amount of the funds flowing through them. They are not targets of direct investment: their net investment registered through various financial instruments is close to zero over longer periods of time. At the same time, large amounts are moved through them, and thus their transactions inflate particularly the assets and liabilities of the financial account, which distorts the statistics describing the real economic and financial processes of the national economy.

In line with the international requirements, from January 2006 the MNB has also been preparing the balance of payments and the related international investment positions which include SPEs on a gross basis, to enable the analysis of international data by mirror statistics. At the same time, the balance of payments and international investment position of Hungary can also be analysed from an economic aspect based on data excluding SPEs. The time series tables contain these data. In its statistical

publications and reports, the MNB analyses data excluding SPEs. Hungary has compiled the BOP and IIP separately including and excluding special purpose entities since January 2006.

As a result of the amendment of the act on the corporate income tax in November 2002, after 1 January 2003 no off-shore companies could be established in Hungary and existing off-shore firms had to be transformed into normal status by 1 January 2006. When their legal status was withdrawn, there were two typical types of off-shore companies present in Hungary. In one of them, Hungarian companies mostly played a passive intermediary role in transactions, and thus 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 which also had some real economic 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 the available indicators that capture the main characteristic of these enterprises, i.e. that they predominantly operate abroad and have minimum links to the domestic economy.

At present, data collection may only cover resident enterprises. Nevertheless, Hungarian enterprises may also establish SPEs abroad; their future identification and segregation will be aided by the common EuroGroups Register (EGR).

The following criteria are used in practice for the identification of resident SPEs:

- In their balance sheets, the ratio of nonfinancial 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 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.

# Issues relating to the treatment of Special Purpose Entities

According to the definition, special purpose entities operate primarily abroad, with minimal links to the economy of the country concerned. Their treatment is problematic for several reasons:

• In the case of SPEs, inflows and outflows often appear under different instruments in the balance of payments. The incoming equity often leaves the country in the form of loans, or an incoming loan leaves as equity investment or income, rendering the interpretation and analysis of the economic processes more difficult.

As an important feature of these enterprises operating abroad, they pass through large volumes of capital, and thus their transactions inflate the gross components of the financial account in particular. In respect of the financing of the current account, the relative role of debt-creating and non-debt-creating instruments is particularly significant. Decision makers, investors and rating agencies all consider this information to be crucial for the vulnerability of the forint and the sustainability of the external equilibrium. This issue arises if the assets and liabilities of an enterprise operating abroad affect different instruments: this may distort the proportion of debt-creating and non-debt-creating financing.

• The typical activities of SPEs have changed in Hungary over time.

In 2006, they would typically lend further the equity they received to a non-resident member of the company group. Later, they would more commonly use their capital to purchase equity participations, then establish branches abroad and contribute their businesses to those branches. The most recent development is withdrawing the capital from one foreign branch and establishing a subsidiary in another country.

• The definition of SPEs may also change over time.

In our previous approach, SPEs were by definition not allowed to engage in real economic activities. This meant that the balance of payments compiled for SPEs contained items mostly in the instruments of direct investment. Recently, however, some enterprises appeared with real economic items (certain types of services) in their balance sheets and income statements that call for the reconsideration of our past approach. Furthermore, another problem is the classification of enterprises that show the characteristics of SPEs, but as they also perform some activity linked to the resident economy, they work with a higher number of employees. Yet they have huge 'pass-through' transactions, which questions their 'normal' enterprise status and undermines the usability of statistics. These problems also arise in a number of other countries with SPE presence.

#### 2.1.3.2 Capital in transit and asset portfolio restructuring

In countries significantly affected by foreign capital flows, including Hungary, it is an issue to distinguish those capital flows passing through the country (capital in transit) and does not affect the external finance of the national economy.

2.1.3.2.1 The definition, approach of international methodology for the concept of capital in transit

Within a multinational corporation, mixed groups can be formed from SPE and non-SPE affiliates in a country (see figure 3 in section 1.5.1). There are companies that perform real economic operations and therefore cannot be classified as SPEs, however at the same time, they also take part in intermediary activities and their foreign parents pass through them large amounts from one foreign subsidiary to the other. In Hungary we call these transactions capital in transit, which pass through resident subsidiaries also engaged in real economic operation.

#### 2.1.3.2.2. National practice in Hungary for filtering out capital in transit

In Hungary since 2006 we have identified that segment of the capital in transit which passes through special-purpose entities: we compile a separate balance of payments for regular companies and SPEs. On the website, we separately publish our data with and without special-purpose entities. However, from the end of 2011 huge capital in transit transactions have appeared within the scope of regular companies in which the inflow and outflow takes place within the same quarter. As mentioned above, there is no general international methodological guidance on how to treat these special transactions, but we had to find a way to separate them 'immediately', since these transactions distorted our statistics excluding SPEs very significantly. In the second half of 2011, the MNB launched a project exploring the phenomenon of capital in transit, with the purpose of identifying and separately presenting them. The identification of capital in transit transactions based on the pass-through nature of the transactions in the monthly balance of payments is compiled. Typically, large capital in transit transactions are completed within one month, but they may also affect several periods, if the end of the relevant month or quarter is between the inflow and the outflow of the capital.

(This micro-level approach, taking account of every company individually, is possible in Hungary because the relevant scope of companies only includes 10- 20 enterprises and there are less than 10 such transactions quarterly. At the same time, the size of the transactions is sometimes one magnitude larger than the value of regular transactions, which must be explained to the users.) As a result of this work, since September 2012 capital in transit transactions have been presented in a separate table on the website of the MNB, retrospectively to 2008. Furthermore, in order to make the direct investment data more interpretable, FDI flows excluding capital in transit are published separately.

**Capital in transit**: We refer to capital in transit, when a resident, non-SPE company belonging to a multinational company group is also active in passing through capital within the company group, in addition to normal activities (production, service). This activity increases the total value of capital inflows and outflows in the statistics, but similarly to the activities of SPEs, this flow of capital has no effect on the economy of the given country.

We consider the following transaction pairs as capital in transit transaction:

- equity investment by non-residents (which may be direct investment, portfolio investment), → equity investment by Hungarians abroad.
- equity investment by non-residents → lending by Hungarians to non-resident members of the company group,
- loan received from parent/other non-resident members of the company group → equity investment by Hungarians abroad,
- loan received from parent/other non-resident members of the company group → lending to a non-resident subsidiary/ member of the company group.

But we **do not consider** transaction pairs generated by portfolio reclassification and offsetting arrangements of claims/liabilities as capital in transit, since these are reclassifications of the asset or liability side portfolio of the resident enterprise:

- conversion of a loan debt/claim to capital injection or repayment of a loan debt/claim from capital injection,
- settlement of accounts receivable/accounts payable,
- realignment of the asset portfolio equity claim instead of credit claim,
- the flow of dividends from a non-resident subsidiary to the parent is not considered capital in transit.

#### 2.1.3.2.3 Restructuring of the asset portfolio

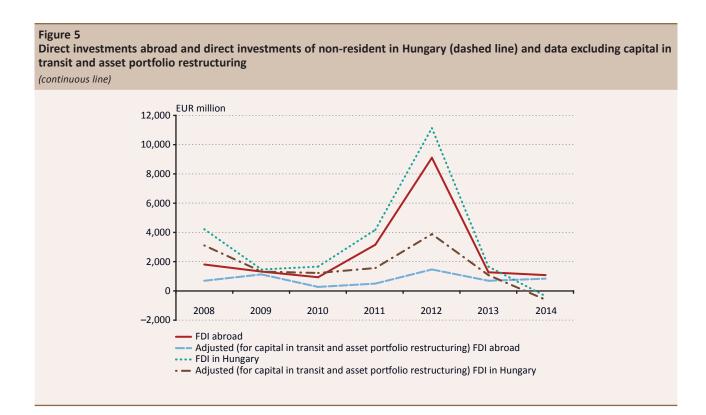
If a multinational corporation realigns its asset portfolio in a cross-border fashion: liquidating one subsidiary, establishing a new subsidiary, contributing the assets of one subsidiary into another, etc., then extremely high capital withdrawal and equity investment transactions must be recorded in the balance of payments without any real capital withdrawal or equity investment taking place into the country. Therefore, together with capital in transit, we also classify these transactions as transactions to be filtered out. We classify into this category those transactions as well when the company court registers capital that has been paid by the investor but not yet subscribed, i.e. treated and filtered out as capital in transit. In order to make the direct investment transactions easier to understand, we publish the data on foreign direct investment in Hungary and investments by residents abroad also excluding of capital in transit and asset portfolio restructuring.

# 2.1.3.2.4 Adjusted direct investment data

In Hungary, the effect of capital in transit affecting 'normal', non-SPE enterprises and that of the asset portfolio restructuring was especially significant in 2012, and the annually varying magnitude and the need to analyse the data make it especially important to filter the data for capital in transit and asset portfolio restructuring.

#### 2.1.3.3 Treatment of transactions relating to VAT registration

With Hungary's accession to the European Union, it became possible for non-resident enterprises to make their acquisitions and sales in Hungary through entities subject only to VAT registration, without a physical presence. These VAT registrations are issued tax numbers and their founders may make their trade-related VAT payments through these entities. From the point of view of the balance of payments and national accounts, these VAT registrations do not form a part of the Hungarian economy. However, as the register of intra-Community trade statistics (Intrastat) relies on VAT payments, VAT registrations are considered



to be data suppliers for the purposes of Intrastat. Consequently, they need to report external trade transactions vis-à-vis non-residents to resident statistical offices, in the case of Hungary to the HCSO. Thus, the transactions of these VAT residents are also included in the trade balance data compiled by the HCSO.

The statistical problem is that through these VAT registrations non-resident enterprises realise value added that is included in the external trade statistics of the HCSO while it is not present in the financial account of the balance of payments. When the HCSO data are used for compiling goods without adjustment in the balance of payments, this value added (the difference between the prices applied to the resident and non-resident parties) will be a source of a statistical error in the balance of payments since the financial account includes figures entered in the books of resident enterprises; in other words, this value added does not belong to the resident economy. Having realised the problem, the compilers of the balance of payments and national accounts prepared an estimate for the level of the value added concerned and in September 2008 released the revised goods time series back to 2004, reducing export and increasing import data. Since September 2008, the adjustment of trade in goods data for VAT registrations has been an ongoing exercise.

The purpose of the revision of 2008 was to assure that value added through VAT registrations in Hungary and included in the external trade statistics of Hungary but not belonging to the resident economy is not recorded in the balance of payments and national accounts. In the first step a macro-estimate was applied. However, when work was continued, it became clear that the value added through VAT registrations may be significantly different over this population, and therefore each registration should be treated individually. In addition, VAT registrations established by Hungarian resident companies abroad have also appeared, as well as VAT registrations that have no resident connections, their partners are all non-residents. In this latter case, the solution is to remove their reported data from trade in goods. As regards adjustments related to VAT registrations, the MNB released the new results first in September 2011, which was followed by their improvement in September 2012 and 2013.

# 2.1.3.4 Methodology of the applied CIF/FOB adjustment

According to the balance of payments and national accounts methodologies, the foreign trade data collected by HCSO at border values need not be adjusted to obtain FOB values for exports, but an adjustment is required for imports. The foreign trade data compiled by the HCSO show imports of goods at a CIF value including charges incurred up to the Hungarian frontier, while the balance of payments and national accounts methodologies require goods data up to the exporter's customs frontier. Therefore, all the countries, including almost every Member State that uses the external trade data collected by statistical offices for the compilation of the balance of payments implement, make a CIF/FOB adjustment, whereby the value of the imports of goods is reduced to the value at the exporter's customs frontier.

The CIF/FOB adjustment can be calculated at different degrees of differentiation. In this respect, Hungary for a long time followed the simplest approach possible: imports of goods at FOB value were compiled by using a single rate for the total economy (2.66%), the level of which was calculated by the HCSO using the customs statistics data, which were available for all partner countries at that time. Improvement of the CIF/FOB adjustment methodology, however, required more detailed breakdowns by partner countries, goods and modes of transport. In recent years, increasing numbers of Member States implemented methodological reviews in this field, and they now make up the majority. There are two alternative methods to obtain the information needed for the additional calculations: to collect additional data to assess the differentiation of the adjustment, or to prepare estimates based on the existing data sources for freight costs and in particular for the shares of non-residents by partner countries, goods and modes of transportation. Hungary has adopted the latter method.

In a cooperative effort of the HCSO and the MNB, the new estimate for the CIF/FOB adjustment rates was completed by 2010 and the two institutions published them first in September 2010 both in the balance of payments and national accounts, retroactively back to 2004. Following this, the new publications are prepared according to the new methodology. Not only do the new figures rely on much more differentiated adjustment rates, the former whole-economy rate has also been modified (from 2.66% to around 2%). As a result of this, the country breakdown of the imports of goods as well as the value of the imports of goods for the whole economy has also changed.

#### 2.1.3.5 Methodology of the applied COPC adjustment

Pursuant to international statistical standards, only profits from the *normal course of business(current operation)* of an enterprise should be recorded as direct investment income. Any elements arising outside the normal course of business, as a result of 'extraordinary' factors, are to be filtered out. The removal of extraordinary elements is necessary to allocate changes in the net worth of the company statistically correctly between income, revaluation and other stock changes. This procedure is called COPC adjustment, based on the international name of the methodology (current operating performance concept). The introduction of the data collection system based on direct reports of the reporting entities in Hungarian practice in 2008 enabled the filtering out of extraordinary elements and income recording according to COPC.

The sign of the COPC adjustment which modifies after-tax profits is positive if, overall, a profit is generated as the sum of extraordinary items and negative if a loss arises as the sum of extraordinary items. In the balance of payments, the amount of adjustment not related to the current operation is deducted from the after-tax profit reported by the enterprise. This means that in the case of loss arising from that, the adjustment will increase the income recorded in the balance of payments, and through that the increase of shareholders' equity through the transaction will grow (cf. the accounting of reinvested earnings), which is offset by the negative value of revaluation and/or other change in volume in the international investment position. We have a reverse case when total profit is realised on the income items: the recorded income will decrease as a result of the adjustment, through which the increase of shareholders' equity (through the transaction) will be lower, which will then be 'offset' by the positive value of revaluation and/or other change in volume in the international investment position. Clearly, the value of shareholders' equity will not be different with or without the adjustment related to the current operation, but the components of the change in shareholders' equity (transaction, revaluation, other changes in volume) are different, depending on whether or not there is adjustment related to non-regular course of business.

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

In the financial crisis, it has become more important to filter out extraordinary elements (e.g. FX loss, loss from revaluation). Since 2009 the adjustment related to current operation shows that a loss has been generated on both investment direction (direct investment abroad and direct investment in Hungary). The resultant higher income related to foreign direct investment does not constitute earnings actually available for distribution. In 2011, the adjustment related to current operation was significantly affected by the depreciation of assets, the change in FX rates, the write-down of loans and the losses caused by final loan repayment.

Table 3						
Amount of earnings recorded as income and the COPC adjustment (EUR million)						
1 FDI abroad, income on equity	2008	2009	2010	2011	2012	2013
1.1 After tax profit	891	463	592	612	1,057	337
1.1.1. Of which COPC adjustment	426	-113	-43	-252	-241	-649
1.1.2. Adjusted FDI income, Published (1.1-1.2)	465	576	635	864	1,298	986
2 FDI in Hungary, income on equity	2008	2009	2010	2011	2012	2013
2.1 After tax profit	3,702	1,467	1,545	-342	2,705	2,803
2.1.1. Of which COPC adjustment	-1,257	-1,863	-2,330	-4,966	-1,998	-1,541
2.1.2. Adjusted FDI income, Published (2.1-2.1.1.)	4,960	3,330	3,875	4,624	4,703	4,344

Because of the enhanced significance of the items to be eliminated at the time of the crisis, in international methodology the all-inclusive concept of income accounting is expressly no longer recommended. For countries where income is still recorded on an all-inclusive basis, the OECD recommends that supplementary information be provided for extraordinary components on aggregate to facilitate interpretation of the data.

The MNB requests respondents to report items not closely linked to the normal course of business in the annual questionnaire on direct investment.

Table 4	
Income ite	ms considered for the COPC adjustment
	Items of the reporting institution's profit and loss account not closely related to ordinary operation
1	Amount paid for severance pays (-)
2	Loss of value on stocks and receivables (-)
3	Backmarking loss of value on stocks and receivables (+)
4	Accelerated descripton of tanglible assets (-)
5	Backmarking accelerated descripton (+)
6	Loss of value on financial assets reduces with backmarking (-)
7	Amounts paid/accounted/payable in relation to claims (-)
8	Amounts received in relation to claims (+)
9	Derecognised book value based on the sale of tangible assets (-)
10	Consideration received from the sale of tangible assets (+)
11	Derecognised book value of tangible assets upon destruction/scrapping (-)
12	Profit of financial assets selling (the prefix is (-) if it is a loss, and (+) if it is a gain)
13	Realised and non-realised loss/gain (the prefix is (-) for a loss and (+) for a gain)
14	Holding loss/gain on interest hedging transactions (the prefix is (-) if it is a loss, and (+) if it is a gain)
15	Holding loss/gain on other derivative transactions (the prefix is (-) if it is a loss, and (+) if it is a gain)
16	Cancelled liability (+)
17	Cancelled receivables (-)
18	Net sum of the items of extraordinary result that is not listed above (the prefix is (-) if it is a loss, and (+) if it is a gain)
19	Dividends earned from investment or follow enterprises in its accumulated reserves during the current year (retained earnings in previous years) (+)
20	TOTAL (01+02++18)

#### 2.1.3.6 Accounting for EU transfers

In the balance of payments, the treatment of EU transfers was harmonised with the national accounts methodology in September 2009.<sup>6</sup>

The treatment of payments to the EU budget is regulated in detail by ESA 2010, the European System of Accounts. Under that methodology, direct payments by production units and taxes collected by the central government on behalf of EU institutions need to be recorded as taxes on products. Thus, customs duties and sugar industry contributions are treated as taxes on products. Income transfers by national governments (VAT and GNI based contribution and the 'UK correction') are recorded as other current transfer expenditure.

ESA 2010 contains no accounting rules similar to the above in respect of the transfers received from the European Union. Those rules are set out in the *Manual on Government Deficit and Debt*, the methodological guide for purposes of Maastricht reporting.<sup>7</sup> According to the principles laid down in the Manual, transfers need to be recorded on an accrual basis and included in the sector of the final beneficiary.

Adopting the approach used to compile the national accounts and its backcasting to 2004 on the time series resulted in two important changes in the balance of payments statistics.

(1) The first change was transition to accrual-based accounting. Accrual-based accounting in the case of recording transfers to and from with the European Union means that transfers are recorded at the time they are used, under primary income as taxes and subsidies on products and production, secondary income or capital transfer, secondary income or capital transfer. In the period between receipt and use, transfers are treated in the IIP statistics as advances within other investment, as liabilities of Hungary (the central government) to non-residents with maturities of one year or less.

The same approach is applied to programmes where implementation has already started, but the EU contribution will not arrive until later. In such cases, transfers from the EU are recorded under primary income as taxes and subsidies on products and production, secondary income or capital transfer at the time the programme is implemented and the respective amounts are recorded as short-term assets of Hungary (the central government) on the EU until the transfers are actually received.

An even more complex approach is used for recording direct producer subsidies granted from the European Agricultural Guarantee Fund (before 2006 from the European Agricultural Guidance and Guarantee Fund). The Hungarian central government regularly makes advances on these EU subsidies. The relevant amounts are shown in the current account as transfers received by the institutional sectors (nonfinancial corporations and households), and at the same time they are also recorded as short-term assets of Hungary (the central government) on the EU. The situation is even more complicated if the amounts of subsidy disbursed by the central government to the institutional sectors are below the amount due to them in period. Consistent with the requirements of accrual-based accounting, in these cases the full amount due in the given period is recorded in the current account as transfers to the institutional sectors (nonfinancial corporations and households). In the IIP statistics, however, in addition to the amounts paid by the central government to producers being shown as an asset of the central government on the EU, the sums not yet disbursed to producers are also recorded as short-term assets of Hungary (other sectors) on the EU.

<sup>&</sup>lt;sup>6</sup> Prior that, the sources received from the European Commission and payments into the EU budget had been recorded in the balance of payments at the time of receipt or disbursement, as current or capital transfer income, or as expenses. We had recorded the transfers as income of the central budget, with the exception of direct producer subsidies from the European Agricultural Guarantee Fund. We recorded this latter as income of nonfinancial corporations and households.

Manual on Government Deficit and Debt: http://epp.eurostat.ec.europa.eu/portal/page/portal/product\_details/publication?p\_product\_code=KS-RA-13-001

(2) The second important change was the allocation of EU transfers across sectors. Under the approach harmonised with the national accounts, transfers from the EU must be recorded directly as revenue of the final beneficiary. Even though subsidies – except the aforementioned subsidies granted from the Agricultural Guarantee Fund – are channelled to the final beneficiaries through the central government, only those amounts are recorded as primary income, secondary income or capital transfer revenues of the central government which are actually used by the institutions of the central government subsector. The remaining revenues are allocated to local governments, nonfinancial corporations, households and non-profit institutions (serving households).

If the European Commission explores any irregularity in its audits in the use of the transfers, the transfers paid out in the earlier period will be withdrawn. The transfers to which the country is entitled will not be lost by this, since they may be spent on other projects later on. This is the so-called financial correction. In the balance of payments, in the case of financial correction we record a current transfer provided to the European Union, counterbalanced by an increase of debt to the European Union. The date of recording is the same as the date on which the decision on the financial correction was made.

# 2.2 DATA COLLECTION AND PROCESSING SYSTEM

In Hungary, in respect of the data collection within the scope of responsibility of the MNB, the transition took place in 2008 from the settlement system completed by supplementary questionnaires to a data collection system based on direct data provision reports.

At the heart of the new information system there is a structure, where a central role is played by large corporations reporting all balance of payments and international investment position data with monthly frequency and the quarterly and yearly questionnaires, as well as various estimation procedures.

# 2.2.1 Current data collection system

In the Hungarian system, the allocation of responsibilities between institutions is similar to the systems of continental Europe: information on the real economy relies on data collected by the HCSO, information on the financial account, the related stocks and investment income comes from the MNB data collection. In the case of transfers, the generation of data from data sources in the general government or administrative bodies is the responsibility of the HCSO, while other transfers of economic entities are derived from the data sources of the MNB.

The new data collection system includes monthly, quarterly and yearly questionnaires. On a monthly level, the compilation of data meeting the international expectations is ensured by the monthly reports of economic entities of determining importance for the balance of payments. Data supply is based on designation in the case of the monthly surveys while quarterly and yearly direct investment questionnaires are submitted based on a threshold.

The most important information on data supply is available on the dedicated Internet site of balance of payments statistical data collection (minisite).

Operated on the MNB's website, the minisite contains a short overview of the balance of payments for information to the reporting entities; it provides the legal basis for the data collection, the policy on data privacy and sanctions and also contains the detailed table images of the reporting forms, the aspects of the audits, the completion instructions, the code tables necessary for completing the forms, the methodological guides, and presents EBEAD, the electronic data receipt system.

At present, the scope of data suppliers for the purposes of the balance of payments is determined through the combined use of the following two methods:

(1) The MNB designates, in writing, the most significant economic actors (big players), constituting the scope of companies obliged for *monthly reporting* in the subsequent year. In this event, the data supplier must submit all the monthly BOP data collected by the MNB for the reporting entity group, irrespective of threshold (transfers, non-produced, nonfinancial assets,

direct, portfolio and other investment, financial derivatives and employee stock options). This system has the advantages of yielding statistics of adequate quality and not placing unnecessary burdens on data suppliers and on the data receipt and processing capacities of the central bank. It is a drawback that if an entity is designated during the year that performs a significant international transaction concerning the financial account, it is not possible to obtain the data of the reporting period preceding the date of the individual designation, since data supply cannot be required retrospectively; at the same time, the quarterly data supply detailed in the next section can be required even retrospectively.

(2) In case of economic agents expected to have minor significance or for new entities, quarterly reporting is required based on the so-called threshold method. In this case, the economic entity itself must determine the areas of reporting it is subject to and it must comply accordingly. The definition of the scope of data suppliers by threshold results in an unambiguous, predictable legal position for data suppliers not required to submit monthly reports, while for the MNB it assures the ability to request data specified in the MNB decree without any time limitation. In the case of failure to comply with a reporting obligation, the MNB may demand submission of the data, in the framework of a central bank audit as defined in Section 62 of the Central Bank Act, with retroactive effect to the date of entry into force of the decree. This arrangement does not preclude the possibility to warn potential data suppliers in a letter to meet their data reporting obligations.

For the maintenance of appropriate records of data suppliers, the MNB keeps a register of BOP data suppliers; for the updating and maintenance of this, the MNB relies on the reported data as well as on other publicly available data, information.

The reference period is the calendar month for monthly reporting, the calendar quarter for quarterly reporting and the calendar year for yearly reports. Enterprises working with different financial years report direct investment data on the financial year ended in the reference year. The required reporting frequency and deadlines are to be observed in this instance as well.

The timeline for the submission of reports is generally ten working days after the end of the reference period.

To assure full consistency between the flow data in the financial account and the international investment position, we opted for a closed-model observation for data collection, taking into account the reporting features of the individual sectors. The model assures, within a reporting session, consistency of opening and closing positions: the sum of the opening position and changes in stocks (transactions, price and other volume changes) need to be identical to the closing position by the required reporting attributes (e.g. by instrument, currency and foreign counterparty).

To assure that exchange rate changes are recorded accurately, individual data must be reported to the MNB in the original currency, except for derivatives, which must be shown in forints; furthermore, some of the direct investment reports must be made in the currency of bookkeeping.

# Structure and general characteristics of data collection

Entities designated for data provision or reaching the reporting threshold must submit reports on their transactions with non-residents as recorded in their books or other records. There are only a few exceptions to this general rule: the R10 report on syndicated loans to residents of credit institutions, R21 and R39 on the maturity structure and early repayments of such loans, and R38 on credit and debit entries on resident non-bank clients' accounts due to payment transactions with the rest of the world (in HUF and foreign currencies).

In reports on financial instruments, assets and liabilities and the related accrued income must not be netted. To this end, assets and liabilities are reported in tables with different codes and names.

The reports on the various topics are designed with due consideration of the reporting characteristics; accordingly, they tend to contain more than one table. The tables with substantive data are preceded by a cover page, which shows the name and contact details of the person completing the reporting form and the person responsible for reporting.

With a few exceptions, the tables are 'flexible', meaning that the data supplier needs to fill in, in an appropriate format, a predefined number of columns depending on the dimensions of the data to be reported, while the number of rows are not fixed. The number of rows in the report depends on the number of variants the data supplier has for the groups of dimension concerned (e.g. instrument, original maturity, country, currency).

The columns indicate the dimensions of the data; some of these must be filled in with codes while others have free, date or number formats. There are separate code lists for the codes and descriptions of the instrument, currency, country, original maturity, certain changes in the positions during the period and other identification codes and names. Detailed explanations are provided in the code tables and technical information for the reporters on the website.

The data must be reported in a closed model (except for equity capital), i.e. the closing position must be identical to the sum of the opening position and the net changes in the financial instrument concerned in the period for each dimension (e.g. instrument, country, currency, etc.).

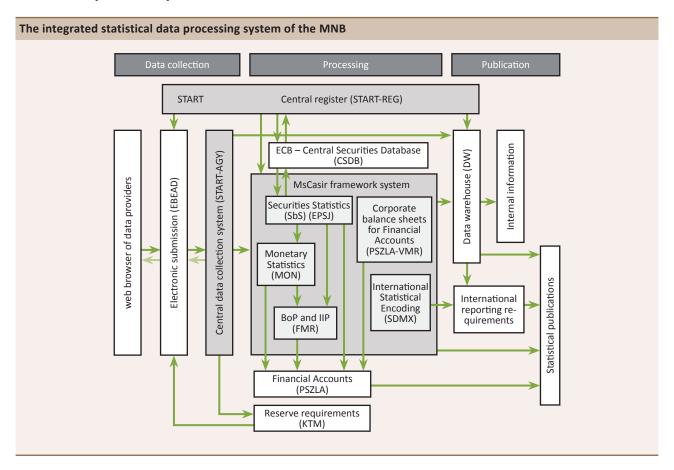
The opening position must be identical to the closing position reported for the previous period.

Depending on the instrument, changes in the period must be broken down by gross (increase and decrease) or net (difference of increase and decrease) transactions and other changes. Where appropriate, the latter are detailed in separate tables.

As a rule, data must be reported in the original currency, in whole units; the following cases are exceptions:

- annual survey on direct investments (R29), to be reported in the currency of bookkeeping rounded to the thousand,
- FDI monthly (R02, R03) and quarterly (R12, R13) reporting, to be shown in the currency of bookkeeping (dividend+equity),
- containing the supplementary balance sheet data of nonfinancial corporations and the export and import data related to VAT registrations operating abroad and in Hungary (R19), and
- the quarterly report on Credit and debit entries on the resident clients' accounts caused by foreign transactions (HUF and foreign currency) (R38), to be supplied in HUF million, and
- data supply on financial derivatives (R05, R14) to be reported rounded to the forint.

# 2.2.2 Data provision process



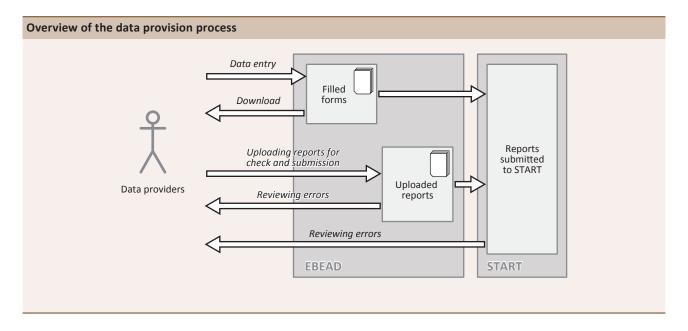
Within the integrated statistical system electronic data receipt, on-line quality check and data storage are provided by the EBEAD and START systems.

When sending data, the reporting entity encounters the EBEAD application.

The services of the EBEAD system are available through a web-based user portal. The EBEAD system provides a protected, secure channel to transmit individual data to the MNB. The features of the system have two main functions:

- the system offers a flexible solution for the entry, upload, checking and submission of data (reports) to be supplied to the MNB, and
- gives access to the *announcements* of the MNB, sending questions containing data in a safe manner to reporting entities and the diary function keeps track of data provision obligations towards the MNB.

The purpose of the data provision function is to assist data suppliers with manual data entry, to check reports and to give feedback on the errors of the data entered.



The *Data entry* function of the system facilitates manual entry of the data to be reported in a dynamic user interface. This is useful primarily for data suppliers without their own report generation application. Following the entry of data, reports can be downloaded or automatically transmitted to EBEAD.

Correct reports uploaded into the EBEAD system are not considered automatically as submitted by the MNB. In order to officially validate the report, it must be submitted to the MNB from the EBEAD system, which can be done on the EBEAD interface.

The submitted reports are forwarded to and stored in the **START** system of MNB.

Major functions of the START system:

- (1) definition of the reports and the related tables,
- (2) definition of the required formal checks of consistency within a data report and the content checks between data reports,
- (3) storage of the reported data and various query options on them, and
- (4) addition and maintenance of the uniform statistical register (organisation, securities and foreign partners in direct investment), several code repositories and content IDs, which are used not only by the data receipt function, but also by statistical processing applications and the data warehouse.

From the EBEAD system, a report can be forwarded to the START system only if it has no error or only contains errors marked as acceptable by the MNB. Acceptable errors must always be accompanied by an explanation. Using the data stored here, the START system performs additional checks on the submitted reports, such as between the reported opening stock of the reference period and the closing stock preceding the reference period, required identities between certain reports (between the closing stock of the reference period and stocks provided in a maturity breakdown), etc. The errors identified by the START system can be viewed by data suppliers on the EBEAD interface. If required, the reports sent into START can be downloaded in different file formats.

The purpose of the *communication functions* of EBEAD is to provide effective support to the flow of information between MNB and the data suppliers. The MNB may publish *announcements* addressed to every data supplier, their selected groups or to individual data suppliers. The announcements are available for viewing on the EBEAD interface. The viewing of certain announcements may be subject to approval, and after approval the MNB considers these as acknowledged.

In the diary function, the EBEAD system keeps a personalised to-do list for every data supplier; this allows the MNB to remind data suppliers of their obligations. These may include, on the one hand, report-related duties, on the other hand, one-off tasks defined by the MNB staff. Warning times may be designated for each task. When the warning time or deadline expires, the system sends an e-mail warning to the set contact persons.

The system provides flexible support to the modification of the *access control* environment. In accordance with the strict security requirements, the system is accessible only after authentication. Authentication is performed through a digital certificate or the entry of a username and password. Users are added by the MNB, for which the relevant registration form must be sent to the MNB.

# 2.2.3 Data processing system

The Balance of Payments System (FMR) processes the data obtained from various sources into records of uniform structure and enables the query of the data records by dimension; furthermore, functioning as a separate module of FMR, the report-creating subsystem provides a user-friendly interface for the flexible fulfilment of the domestic and international needs for data supply.

FMR obtains the input data necessary for processing from the following source systems:

- (1) From the **START** system the individual reports of data suppliers listed in Annex 1 and the real economic (goods, travel, other services) and other (compensation of employees, transfers and supplementary direct investment) data reports of HCSO, as well as the registers, code repositories, content IDs;
- (2) from the **EPSJ** Securities processing system the portfolio investment data created by EPSJ, in the breakdown necessary for the balance of payment statistics releases; and
- (3) from the **ASS** exchange rate system the daily exchange rate data, based on which it will calculate the month-end and monthly average exchange rates necessary for converting data reported in the original currency.

# Data reported and transmitted are supplemented by estimations:

Households do not supply data for the balance of payments; therefore their missing loan and deposit data are estimated using the reports of the counterparty central banks and BIS, while their foreign currency transactions are estimated using the currency exchange reports of credit institutions. The accrual-based monthly EU transfers and the related receivables and payables visa-vis the EU are also estimates. In the case of data not available upon processing for the reference month (e.g. data supplied quarterly, annual after-tax earnings), or data not provided in the expected breakdown, an estimation is performed in the balance of payments.

Different reports of respondents, identified with business meaning are transformed by FMR (the processing application for BoP statistics) through a series of monthly and revision processing steps, into a so-called 'FMR' record set containing uniformly structured records.

In producing the monthly balance of payments data, the reports of the designated economic entities for the relevant month and estimates are used. The monthly reports of the close to 750 economic entities give a comprehensive picture of their monthly transactions and positions of their financial instruments vis-à-vis non-resident counterparties as well as their transfers. As for the data to be supplied by the HCSO, the trade in goods figures are monthly, while other reports are quarterly, and therefore the monthly data for these reporting areas are estimated.

In revision processing, in addition to the monthly reports, the quarterly and the yearly reports are also used to create the revised data for the reference quarter and the quarters defined in the release calendar, in a monthly breakdown. The maturity breakdown of long-term debts outstanding at the end of the quarter are also produced and published on a quarterly basis.

At the end of processing, the data are moved to the analytical subsystem and are incorporated into the so-called supermatrix. The supermatrix is a database that facilitates queries of previously released and recently processed data by time series, according to the dimensions of FMR records (e.g. country, currency, instrument, data supplier), using, among others, the OLAP cube. Data can be queried in two aggregation currencies (HUF and EUR).

The micro-, macro- and meso-level verifications of the reported data continue to be based on the FMR data.

The experts of the balance of payments functions perform additional time series and plausibility checks; if any issues arise, the data supplier must give an explanation in writing or, in case of more complex economic events, consultations are held.

The annual corporate reports available on the so-called electronic reporting site of the Ministry of Justice help to verify the comprehensiveness of the data to a great degree. Reported data of 'big players' are verified annually based on the notes to financial statements, and furthermore, the electronic and print media and other sources are also used for the monitoring of respondents.

Joining individual corporate data available in the data warehouse has enabled the compilation of balances of payments for individual companies, for the purpose of auditing.

In case of errors in the data submitted, the MNB, under its sanctioning powers, may conduct on-site or off-site audits or it may request retroactive data correction. In severe cases, in addition to the sending of warning letters and letters of notice, fines may also be imposed.

After the approval of processing, the domestic and international data provision needs are satisfied in a flexible manner, for which the reporting subsystem provides a user-friendly interface.

# 2.3 RELEASE AND REVISION OF BALANCE OF PAYMENTS STATISTICS

# 2.3.1 Release calendar

The <u>release and revision calendar for the balance of payments</u> is updated for 12 months in advance at the end of June and December; thus it is always available on the MNB website for at least half a year prospectively.

The MNB compiles its BOP releases in HUF and in EUR and makes these available in the Hungarian and English languages on the website of the MNB.

# Monthly releases

Simultaneously with the switch to the new methodology, 8 on its website the MNB publishes the monthly balance of payments data as well, in addition to the quarterly main release. The financial crisis increased the importance of information contained in the balance of payments (especially in the financial account). The monthly data enable analysts and decision makers to obtain the required information earlier; at the same time, the monthly figures contain more estimations (data of travel, other services, certain secondary income). In the quarterly data dissemination, these estimations are replaced by the actual data obtained from the quarterly HCSO data collection. The MNB only releases monthly data concerning the open quarter. Still, only the quarterly data are suitable for time series analysis, stand-alone press releases continue to be related to the quarterly data dissemination.

The monthly data are released on the website of the MNB on the 44th day following the reference month.

<sup>&</sup>lt;sup>8</sup> The MNB released the April and May figures for 2014 in July 2014 for the first time.

Furthermore, statistics relating to the international reserves are published by the MNB with monthly frequency, as follows:

- on the 7th day after the reference month, the main components of the international reserves are released as preliminary data, while
- on the 18th day after the reference month, in line with the requirements of the IMF SDDS, the final data on the details of reserve assets and foreign currency liquidity are disclosed.

#### Quarterly release

The MNB releases the quarterly balance of payments and international investment position on the 85<sup>th</sup> day following the reference quarter. The transaction and stock data in the balance of payments statistics are explained in the press release, and the detailed standard tables are published on the website. The website separately shows data with and without special purpose entities both in HUF and in EUR.

We publish also on the website the seasonally adjusted time series concerning the main aggregates of the external financing capacity related to the press release in the form of charts.

#### Box 3

#### Seasonally adjusted figures time series

The released time series describe the development in time of economic processes related to the external sector. The behaviour of time series can be strongly influenced by factors that affect the development of the time series in the identical periods of various years (such as a month or a quarter), in the same direction and nearly to the same extent. Such factors may include weather, various administrative defects or even cultural traditions. These factors together are called the seasonal pattern. Analysts are often interested in features of the processes that remain concealed behind strong seasonal patterns; that is why they should be removed. The filtering out of seasonality is called seasonal adjustment. The components of the current account are characterised by the application of seasonal patterns in the time series. For this reason, we also apply seasonally adjusted time series for the major components of the current account, related to the quarterly release.

Seasonal adjustment is performed by the following method:

- 1) Seasonal adjustment is performed in accordance with the recommendations of Eurostat, in the Demetra interface, using SEATS TRAMO software.
- 2) We filter out the effect of holidays using a built-in variable defined for holidays in Hungary, and the working-day effect is filtered out by regression variables in a number selected by the software.
- 3) In order to reduce the need for revision, we generally use the same model settings for one year.
- 4) From the outliers, the software identifies additive outliers affecting one period and transitory changes affecting multiple periods, as well as level shifts.
- 5) Concerning the aggregates and the balances, we apply direct adjustment, meaning that we adjust the aggregates and the balances directly from seasonal patterns, as opposed to applying the seasonally adjusted components to create the balances and the aggregates. Accordingly, seasonally adjusted aggregate data cannot be reached by summarising the seasonally adjusted data of the components, and seasonally adjusted data of the balance is not the difference of the seasonally adjusted revenues and expenses.

There is permanent, strong user interest in the various statistics detailing direct investment (by country and activity), which is why the MNB provides the direct investment data collected on a dedicated page on its website. On a quarterly basis, we release transaction figures by country and activity, also excluding capital in transit and asset portfolio restructuring.

#### **Annual releases**

In line with the processing of annual reporting on direct investment, annual data are first released in the 9<sup>th</sup> month following the reference year. We are able to compile the balance of payments and the related international investment position on the

basis of the annual questionnaires by this time. Even though the data for Q4 and the revised data for Q1-Q3 are already available at the end of the quarter following the reference year (31 March), we do not consider these to be annual data as the annual corporate balance sheets and income statements are not yet available at that time.

For the purposes of direct investment statistics, the September release of the annual data is of key importance, as this is when the reported equity income and reported position figures replace the estimates in the statistics. It is also at that time that we release the data on the annual income, flows and stocks.

# 2.3.2 Data revision policy

The revision policy of the MNB was not modified by implementation of the new methodology; the MNB has developed its revision policy adapted to the regular revisions of data sources.

Table 5
Dates of release and regular revision of the quarterly Balance of Payments and International Investment Position

	Period		Dissem	ination	Revision					
Year	Quarter	Month	Quarterly	Yearly	Quarterly	Yearly				
Reference year (T) Q1		March	(T-1)Q4	(T-2)*	(T-1)Q1-Q3	(T-3)(4), (T-2)(2)				
	Q2	June	TQ1		(T-1)Q1-Q4					
	Q3	September	TQ2	(T-1)	(T-1)Q1-TQ1	(T-3)(5), (T-2)(3)				
	Q4	December	TQ3		TQ1-Q2					
T+1	Q1	March	TQ4	(T-1)*	TQ1-Q3	(T-2)(4), (T-1)(2)				
	Q2	June	(T+1)Q1		TQ1-Q4					
	Q3	September	(T+1)Q2	Т	TQ1-(T+1)Q1	(T-2)(5), (T-1)(3)				
	Q4	December	(T+1)Q3		(T+1)Q1-Q2					
T+2	Q1	March	(T+1)Q4	T*	(T+1)Q1-Q3	(T-1)(4), T(2)				
	Q2	June	(T+2)Q1		(T+1)Q1-Q4					
	Q3	September	(T+2)Q2	(T+1)	(T+1)Q1-(T+2)Q1	(T-1)(5) T(3)				
	Q4	December	(T+2)Q3		(T+2)Q1-Q2					
T+3	Q1	March	(T+2)Q4	(T+1)*	(T+2)Q1-Q3	T(4), (T+1)(2)				
	Q2	June	(T+3)Q1		(T+2)Q1-Q4					
	Q3	September	(T+3)Q2	(T+2)	(T+2)Q1-(T+3)Q1	T(5), (T+1)(3)				
	Q4	December	(T+3)Q3		(T+3)Q1-Q2					

#### Notes:

(1) T = reference year; T-1 = year preceding the reference year; TQ1 = Q1 of the reference year; TQ1-Q4 = the 4 quarters of the reference year

# Revision policy of the data sources of the Balance of Payments

The MNB takes data from the HCSO for the compilation of the balance of payments statistics. The revision policy for these data is as follows:

- In respect of trade in goods: in March, the HCSO revises months 1–12 of the previous year, and in September months 1–12 of the previous year and months 1–6 of the reference year. The MNB takes such revisions into account in its own publications in March and September.
- Data on travel remain unchanged. In respect of a period, a single questionnaire survey is conducted.
- For external trade in services, data are revised in retrospect in March and September. Data are considered final after the 8th quarter following the reference quarter. The MNB adopts these revisions in its publications in March and September.

<sup>(2)</sup> In the yearly month: (2) = second release (for revision); (5) = fifth, final release

<sup>(3) \* =</sup> the first release of direct investment stocks, by country and sector

<sup>(4)</sup> highlighted area: from the first release to the final release

- Data for the compensation of employees and the related transfers are revised retrospectively for three years, i.e. data become final in the 11<sup>th</sup> quarter following the current year.
- The MNB publishes the data deriving from the annual questionnaires first after the 3rd quarter following the reference year. In this publication, data on the direct investment of non-residents in Hungary are supplemented (grossed up) using the data from the corporate income tax return (TÁSA) database. The first revision of the annual data occurs at the 5th quarter following the reference year, the second revision after the receipt of the next annual reports (7th quarter after the reference year), if data suppliers implement retroactive revisions to the data for the reference year in the corporate balance sheets. During the year, revised versions of the TÁSA database are also released, thus the supplemented part also changes. The figures of data suppliers using different financial years may be amended even after that date.

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 revision period is longer in March and September, while in June and December it affects only the data of the 'open year'.

Under the new methodology, the first quarterly publication was in June 2014 on Q1 and the annual data in September 2014 on the reference year of 2013. The releases are supplemented by monthly data publications. Monthly data are available for the months of the open quarter, and they are not revised. The revision of the monthly data is the quarterly data.

# 3 Effect of implementing the new methodology on the balance of payments and the related stock data

The international methodology standards of balance of payments statistics, as updated in recent years (BPM6) was implemented in each Member State of the European Union – and thus in Hungary as well – in 2014.

The effect of the switch to the new methodology varies from country to country, depending on how different the methodology applied earlier in the given country was compared to the methodology implemented now. In Hungary, we implemented a new data collection system in 2008, and related to that we implemented several changes that could be predicted at that time from the recommendations of the new methodology, but at that point the new international methodology was not yet finalised. In our institution in the 2000s the treatment of foreign direct investment was more similar in some aspects already to the recommendations of the new methodology than the prevailing recommendations (we detail these at the end of this section). Therefore, in Hungary implementation of the BPM6 methodology did not mean a change of that magnitude in the data that would have significantly modified the prevailing picture of the fundamental economic processes.

Table 6 Effect of the change in methodology as a per cent of GDP													
Percent	2008	2009	2010	2011	2012	2013							
External financing capacity (Current + Capital account)	0.21	0.19	0.19	0.21	0.21	0.18							
Current account balance	0.20	-0.45	0.13	0.14	0.17	0.07							
Goods, net	0.19	-0.44	0.13	0.16	0.22	0.12							
Services, net	0.61	0.81	0.62	0.22	-0.08	-0.25							
IIP net (net assets)	0.00	-1.18	-1.17	-1.17	-1.17	-1.10							
Net external debt	0.29	1.54	1.51	1.51	1.52	1.48							
Gross external debt	0.00	1.18	1.17	1.17	1.17	1.10							
Stock of FDI in Hungary (net liabilities)						-1.56							
Stock of FDI abroad (net assets)						-1.56							

In this section, we review the major aggregates that have changed as a result of the methodology recommendation and present the major modifying factors.

Where it was possible, we backdated the time series with contents matching the new methodology. In Table 7 we summarised which factors could be backdated and to which point in the earlier data.

The longest period of backdating could be extended to as early as 1995, for the reclassification of goods and service figures.

The accounting of EU transfers related to EU accession started in 2004; therefore, it was possible to implement the reclassification of these in line with the new methodology and the reclassification of the equity stakes of international organisations from other long-term claims to other long-term equity stakes starting from that year.

From 2008, our new data collection system enables us to backdate more detailed changes going back to that year. In the rest of this section, we detail the effects of the factors presented in Table 7.

Table 7 Backdating of individual changes in methodology in the time series																			
Methodological items	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2002	2006	2002	2008	5009	2010	2011	2012	2013
Goods for processing are no longer recorded in the balance of payments, only the value added, i.e. the processing fee is recorded under services																			
For repaired goods only the fee is recorded under services, the value of goods under repair is no longer recorded in the balance of payments																			
Merchanting is recorded under goods, credit, instead of Services																			
Reclassification of transfers related to the EU from Current transfers to Primary and Secondary income																			
Reclassification of Equity of International organizations from Other investments, other long term assets to Other investment, other equity																			
Reclassification of sales and purchases of intellectual property rights from sales and purchases of non-produced non-financial assets to Services																			
Recording of illegal goods and activities in consistency with National Accounts																			
Reclassification of FISIM other investment interests to financial services																			
Recording of income of reserve assets in separate line instead of portfolio and other investment income																			
Reclassification of equity participation under 10 percent from Portfolio investment to Other investments, equity																			
SDR-allocation (recording SDR-liabilities as transactions as well)																			
Recording durable and valuable goods among Goods																			
Changes in recording of fellow companies according to the directional principle																			

Backdating was utilised to supplement the time series with data from 1990–1994 which was presented on the website of the MNB in a different structure (with contents in accordance with BPM4), at least at the level of the major aggregates. Data compiled for 1990–1994 according to BPM4 and containing only convertible occurrences were added to the table by a simple rollover; they cannot be perfectly equated with the categories defined in BPM6.<sup>9</sup> We summarised the conditions applied in the rollover in Annex 2.

When major changes affecting all of the international statistics are implemented, every institution takes the opportunity to finetune their retrospective time series and update the data for revisions, changes in the method of estimation and accounting that go beyond the scope of the usual revision periods. Thus, the statistical data of the balance of payments were not only modified as a result of the implementation of the BPM6 methodology, as the HCSO and MNB (including financial account statistics and balance of payments statistics as well) also performed other data improvements, in a way harmonised with each other.

Please note that in accordance with the statistical nature of this Publication, in this section we intend to present the effects of the change in the methodology, the analysis of the (modified) macroeconomic time series; analysis of their development, however, falls outside the scope of this Publication.

<sup>&</sup>lt;sup>9</sup> We mark the resulting break in the series visually as well in the time series tables. These data remain available in their old form on the archived data section of the website of the MNB.

# 3.1 EFFECTS OF THE BPM6 METHODOLOGY ON THE FINANCING CAPACITY CALCULATED FROM ABOVE

In order to create harmony with the national accounts, reclassifications have been made between certain subaccounts of the balance of payments, goods, services, primary and secondary income and the capital account. The implementation of the new methodology primarily affected these reclassified components of the current account and the financing capacity calculated from above.

Considering its balance at the level of external surplus, the deviation is not significant, but a significant shift occurred in credit and debit flows.

The factors that have caused the shift in the data due to the change in the methodology are discussed below.

#### 3.1.1 Goods and Services

The change in goods and services is primarily related to reclassification between these categories (see Table 8). These reclassifications are primarily related to the more consistent application of change of (economic) ownership, considered a primary criterion of treatment under goods. Thus, repair and manufacturing services on physical inputs owned by others must be recorded as services based on the value added (repair and processing fee), while goods under merchanting must be treated as net goods exports (also registering the gross value as supplementary information) under goods (since in the former category there is no change in ownership, while in the latter case there is).

The most significant shift in the goods export and import flows was caused by the change in the treatment of processing. The combined value of process materials and fees (treatment on a gross basis) has so far constituted part of goods trade, but under the new methodology only the processing fee must be recorded (at net value, i.e. at a value calculated without process material) under services. As a result of this process, materials are fully removed from the scope of data, which reduced the gross flows of trading goods by several billion euros annually.

Changes in the data of re-exports are in the opposite direction. This item was recorded as a service item according to BPM5, whereas under the new methodology it is recorded as goods. Net value must be recorded on the export side (re-exports related to import are also placed on the export side, with a negative sign); therefore, the new accounting regime does not change the total value of export of goods and services.

As part of other reclassifications in methodology, repair is also transferred from goods to services, while high value goods imported in private trade are recorded under goods, as opposed to travel. At the same time, as new items not recorded up to now – based on data received from HCSO – trade in goods now includes illegal trade (drug trafficking and contraband) and the item of travel among services includes illegal activity (prostitution), based on estimations. In the national accounts, the HCSO already included transactions related to illegal activity. These are recorded in the balance of payments according to the new methodology, and their value increases financing capacity calculated from above.

Two new additional items are now included in services which do not change the value of financing capacity calculated from above. One is FISIM (see Box 2 for description), i.e. a service element included in interest indirectly, which is recorded under financial services. This service is provided by the credit institutions sector to non-credit institution sectors. Accordingly, interest stated by the reporting entities contain the impact of FISIM. Considering the fact that non-credit institution reporting entities do not apply the intermediation fee of credit institutions, this cannot be determined directly. Calculation is performed at the level of the national economy, considering the breakdown of the reported data according to country, sector and currency. The other item is the sale and purchase of intellectual property rights: trading in property rights of computer software, audio-visual products and results of research and development, which are transferred from the capital account (non-produced, nonfinancial assets) to services.

Table 8 contains the effect of the above reclassifications on credits, debits and balances.

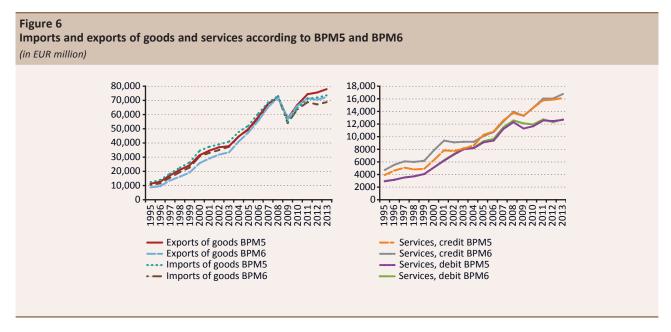
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,	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
							Chan	ge in G	oods, d	ue to re	classifi	cations							
Credit	-2,545	-3,210	-3,725	-4,660	-4,907	-5,446	-5,704	-4,951	-4,673	-3,539	-2,437	-2,606	-2,529	-257	-521	-801	-2744	-5,467	-5,076
Debit	-1,852	-2,389	-2,785	-3,458	-3,635	-3,954	-4,190	-3,707	-3,706	-3,155	-2,784	-2,941	-3,002	-958	-1,285	-1,421	-2,978	-5,409	-4,880
Net	-693	-821	-941	-1,201	-1,272	-1,492	-1,514	-1,243	-968	-384	346	335	473	701	764	619	234	-58	-196
	Change in Services, due to reclassifications																		
Credit	750	856	979	1,241	1,315	1,556	1,596	1,355	1,110	563	-176	-96	-152	-256	-352	-309	112	415	526
Debit	57	36	38	39	43	63	82	112	142	179	170	239	321	475	989	367	406	351	391
Net	693	821	941	1,201	1,272	1,492	1,514	1,243	968	384	-346	-335	-473	-731	-1,342	-676	-294	64	135
	Recording Illegal activities															1			
Credit	0	0	0	0	0	0	0	0	0	0	0	0	0	293	216	209	242	236	253
Debit	0	0	0	0	0	0	0	0	0	0	0	0	0	67	38	23	24	28	73
Net	0	0	0	0	0	0	0	0	0	0	0	0	0	226	178	185	217	208	180
					ı	ı			nges in (				I				I	I	
Credit	-1,795	-2,353	-2,746	-3,419	-3,592	-3,891	-4,108	-3,595	<u> </u>	-2,976	<u> </u>		-2,681	-220	-658	-901	-2,390	-4,816	-4,296
Debit	-1,795	-2,353	-2,746	-3,419	-3,592	-3,891	-4,108	-3,595	-3,563	-2,976	-2,613	-2,702	-2,681	-416	-258	-1,030	-2,547	-5,030	-4,415
Net	0	0	0	0	0	0	0	0	0	0	0	0	0	197	-400	129	157	214	119
Credit	0	0	0	0	0	0	iange ir	Other	investr 0	nent in	come a	ue to F	0	-74	-65	-88	-83	-61	-57
Debit	0	0	0	0	0	0	0	0	0	0	0	0	0	-74 -86	-59	-84	-72	-19	-12
Net	0	0	0	0	0	0	0	0	0	0	0	0	0	12		-5	-11	-42	-45
1100		· ·	0						eclassifi										
Credit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-54	0
Debit	0	0	0	0	0	0	0	0	0	0	0	0	0	-18	-584	-61	-71	-90	-106
Net	0	0	0	0	0	0	0	0	0	0	0	0	0	18	584	61	71	35	106
		Change	in net	externa	al finan	cing cap	oacity c	lue to i	tems af	fecting	Goods	and Se	rvices in	n relatio	on to BI	PM6 ch	angeov	er	
Credit	-1,795	-2,353	-2,746	-3,419	-3,592	-3,891	-4,108	-3,595	-3,563	-2,976	-2,613	-2,702	-2,681	-294	-723	-990	-2,473	-4,931	-4,353
Debit	-1,795	-2,353	-2,746	-3,419	-3,592	-3,891	-4,108	-3,595	-3,563	-2,976	-2,613	-2,702	-2,681	-520	-901	-1175	-2,691	-5,139	-4,533
Net	0	0	0	0	0	0	0	0	0	0	0	0	0	226	178	185	217	207	180

The magnitude of the change is significant in itself on the export and import flows, but compared to the size of the flows it can be seen that although the change in methodology has only refined the categories, it does not fundamentally alter the conclusions drawn about the processes. This is illustrated by Figure 6.

# 3.1.2 Changes in primary and secondary income

Primary income is a new category both in terms of its name and the extended contents. Compensation of employees and investment income has been supplemented by a new income element, which includes taxes and subsidies on product and production (part of the transfers related to the EU), formerly treated as current transfers. The annual magnitude of these increases revenues in 2013 by 1.5 billion euros and expenses by 120 million euros.

In terms of presentation, one new feature is that income from reserve assets is recorded in a separate line (650 million euros in terms of magnitude in 2013); accordingly, income from portfolio investment and other investment (where these have been recorded so far) are reduced. However, in total this does not change the figure for primary income.



Another change is that in the case of foreign direct investment, dividends of unusual magnitude (superdividend) – paid from the accumulated earnings of former years – must be treated in the balance of payments as a capital withdrawal, rather than income. We cannot apply these changes retrospectively in the data, and thus systematic treatment of the superdividend can only start from 2013. The change caused by the treatment of the superdividend only appears in the lines Instruments of dividends and reinvested income earnings with an opposite sign (in 2013 outward superdividends were 130 million euros and inward superdividends were 710 million euros from dividends declared payable); therefore, total foreign direct investment income has not changed.

Charges for financial intermediation services indirectly measured (FISIM) have been moved to services from the interest income of other investments.

Secondary income is the new name of the category previously called current transfers. In addition to the change in the name, one substantial difference is that taxes and subsidies on product and production are transferred to primary income from this category.

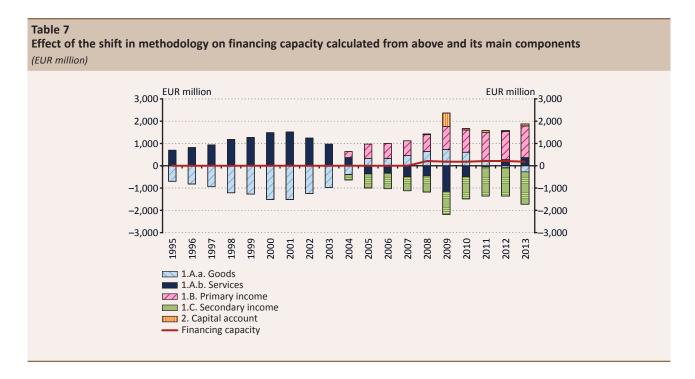
Therefore, if we consider the primary and secondary income categories together, the change is that FISIM has been transferred to services.

If we combine the reclassifications at the level of the current account balance, only the balance of the new items added to goods and services (contraband, changes in outsourced production, high-value goods brought in privately, data of illegal trade and sale and purchase of intellectual property rights) alters the data.

# 3.1.3 Changes in the capital account

In the capital account, trading in property rights of computer software, audio-visual products and results of research and development has been transferred from non-produced, nonfinancial assets to the appropriate service category.

In total, it can be concluded that although the change in methodology has resulted in the reclassification of significant items within the balance of payments from one category to another, this did not cause any significant change in the time profile of the annual data. At the level of international financing capacity, only the items newly added to goods and services modified the balance, while other changes in methodology only changed the evolution of certain subaccounts of the current account and the capital account. Most of the changes which occurred at the flow level were caused by the removal of material for processing.



# 3.2 EFFECT OF THE CHANGE IN METHODOLOGY IN THE FINANCIAL ACCOUNT AND IN THE STOCK DATA

The effect of the changes in methodology in the financial account was even less significant on the data. In the financial account, foreign direct investment must also be presented in a breakdown of assets and liabilities. Within the category of foreign direct investment, the separation of assets and liabilities is also presented in an extended breakdown by instrument; the main instruments did not change, only the names did, and the data became more detailed. The role of equity is replaced by the participation in voting power, while indirect voting power and the role of fellow enterprises are also considered with greater emphasis. Between the lines of equity investment and reinvested income, the treatment of the superdividend<sup>10</sup> as a capital withdrawal appears with an opposite sign, but this change has no effect on the aggregate direct investment data. In the new methodology, it is presented in separate lines for both equity and debt instruments: the direct investment data. In the new methodology, it is presented in separate lines for both equity and debt instruments: the direct investor investment in direct investment enterprise, the reverse investment, and the amount of investment between fellow enterprises. However, we have introduced this more detailed breakdown in the presentation together with the new methodology, and we have already included debt transactions between fellow enterprises as from 2008, only they were not represented on a separate line. By contrast, recording equity under 10% is a novelty and for this reason we only have data for these since 2013. (We detail the effect of breakdown according to the direction of direct investment later).

In debt instruments of foreign direct investment, since 2013 we have performed the assignment of transactions and positions with fellow enterprises to investment directions depending on where the residency of the ultimate investor of the reporting entity is, whereas earlier the basis of the assignment was whether the reporting entity had a direct non-resident investor or investee. This means a reclassification between the investment directions, but has no effect on the total credit or debit transactions/positions.

From portfolio investment, equities that are not constituted by securities and represent voting rights under 10%, and do not belong to the same company group, have been moved to other investment (as other equity). The volume is negligible on the credit side, on the debit side the reclassification was made in a magnitude of around 100 million euros in some years.

<sup>&</sup>lt;sup>10</sup> Outstanding(ly high) dividend payouts (superdividend), which the company pays to its shareholders from the retained earnings, or if dividend is higher than calculated with regular course of business, under the BPM6 methodology it must be represented not as a dividend, rather as a withdrawal of capital.

<sup>&</sup>lt;sup>11</sup> Cross-equity holdings is an equity below 10% in the parent company

#### Box 4

#### Transactions between fellow enterprises broken down by direction of foreign direct investment

In Hungary, the effect of the change in methodology is relatively low in the treatment of foreign direct investment, since from a certain aspect the treatment in Hungary was already converging towards the new methodology in the 2000s. This means that the data of fellow enterprises had to be recorded under the old methodology as well, but the general guideline within Europe was that the claims of such had to be recorded among the foreign claims of residents, while their debts had to be recorded among the investments of non-residents in the given country. Since Hungary is a small country, it therefore became clear for us already when the first major transactions between foreign subsidiaries of multinational corporations and Hungarian subsidiaries (as fellow enterprises) appeared, that we could not consider these foreign direct investment abroad (if, for example, a multinational corporation extends a loan to another foreign subsidiary through its Hungarian subsidiary), as was proposed by the international requirement. Therefore, we recorded these transactions/positions even within the framework of the previous methodology as a foreign direct investment in Hungary (which is a net debt), as a claim.

Under the new methodology, transactions and positions between fellow enterprises with non-resident ultimate investors are recorded among direct investment in Hungary, while those with a resident ultimate investor are recorded among foreign investment abroad. The liabilities of fellow enterprises with no or unknown investors are recorded as direct investment in Hungary, while their claims belong to the direct investment abroad. Already during the 2000s it was the practice in Hungary that we assigned to the individual investment directions assets and liabilities relating to company group members (fellow enterprises) based on the resident status of the direct investment/direct investor, depending on whether the reporting entity has any non-resident direct or indirect investor (foreign parent) or only direct investment abroad (subsidiary).

As a result, implementation of the new methodology had an effect on the classification applied so far (the level of investments to foreign countries and to Hungary), if a company without a direct foreign investor and with a non-resident ultimate investor was involved, (because at that time transactions/positions were recorded as foreign direct investment abroad, while in the new methodology its fellow enterprises data have to be recorded as direct investment in Hungary), or it has a direct foreign investor, but its final investor is Hungarian. (In BPM5, the data between fellow enterprises were recorded as direct investment in Hungary, while in BPM6 they belong to foreign direct investment abroad. For this reason, in 2013 a reclassification was made at fellow enterprises on debt instruments, between foreign direct investment in Hungary and abroad, the value of the reclassification of the transaction was EUR 255 million (in both directions).

The statistical treatment of SDR has changed, which also resulted in changing SDR allotment: SDR has become a debt instrument, accordingly, liabilities must also be represented against allocated SDR recorded among foreign reserves, in the line of other investment. In 2009 Hungary first became the beneficiary of reserve asset creation (SDR allotment) by the IMF. The reserve assets of the MNB were increased in two steps, by a total of 991 million SDR (1.1 billion euros). In BPM6, the allotment itself must be recorded as a transaction, and its effect is recorded not only in the increase of the stock of reserve assets (this was recorded as other change in stocks under BPM5 already), but also in the increase of debts to non-residents (this is the amount by which the gross and net outstanding debt of the country to non-residents increases).

Changes in the treatment of shares in international organisations also modified the debt ratios, since up to that time these items were recorded on other investment as debt instruments; however, after the change in methodology these came to be recorded as other equity and not as debt instruments. Since in most cases claims decreased as a result of the new treatment, this change resulted in an increase in net debt.

# 3.3 RETROSPECTIVE DATA REVISIONS PERFORMED SIMULTANEOUSLY WITH THE CHANGE IN METHODOLOGY

The HCSO and the MNB performed, harmonised with each other, other data revisions as well (including the statistics on the financial account) simultaneously with the changes in methodology, in the data of households concerning the holding of foreign currency, placement of deposits abroad and investments abroad. The acquisition of new data sources has made it possible to represent the foreign financial investments of households in more detail. The changes are also recorded retrospectively in the time series of foreign direct investment going back to 1998 concerning the closing stock, and in the time series of other investment going back to 2008.

Data on the compensation of employees recorded in the balance of payments, the related transfers and workers' remittances are generated by the Central Statistical Office (HCSO). Simultaneously with the switch to ESA in 2010, HCSO retrospectively revised its data sources used for the estimation concerning these, which resulted in a significant change in the data. For more information on this revision, please refer to the publication of HCSO released on 30 September 2014 titled <a href="National accounts of Hungary, 2013">National accounts of Hungary, 2013 (preliminary data)</a>.

The renewed international methodologies deal with the issue of ownership with special emphasis on economic and legal aspects. In terms of statistical treatment, it is important that wherever there is a difference between the two, the economic aspect should prevail in the assessment of a change in ownership. Related to that, based on the detailed assessment of the contents of the relevant transactions, the MNB and HCSO reclassified certain lease transactions from operating to financial lease.

In Tables 9 and 10, we present the numerical changes that took place in 2013 on the individual factors, expressed in million euros. In the tables, concerning the balance of payments and the investment position statistics we present the data both under BPM5 and BPM6, and also the effect of the switch in methodology within the entire shift.<sup>12</sup>

<sup>&</sup>lt;sup>12</sup> As regards earlier years, these tables are available on the website retrospectively to 1995: <a href="http://www.mnb.hu/en/statistics/statistical-data-and-information/statistical-time-series/viii-balance-of-payments-foreign-direct-investment-international-investment-position/balance-of-payments-international-investment-position/effects-of-the-bpm6-changeover-on-1995-2013-annual-data</a>

Table 9 Changes in the balance of payments

(without SPEs, in EUR million)

2013	BPM5	BPM6 (september	Difference	of w	hich
2013	Dr Wij	2014)	Difference	Methodology	Revisions
1. Current account	2,941	4,162	1,221	74	114
1.A. Goods and Services, net	7,811	7,623	-188	119	-30
1.A.a. Goods	4,313	3,586	-727	-254	-47
1.A.b. Services	3,498	4,037	539	373	16
I.A.b.4. Travel	2,383	2,534	151	183	-3
I.A.b.e. Other Services	1,115	1,503	388	190	19
1.B. Primary Income	-5,933	-2,907	3,026	1,407	1,61
I.B.1. Compensation of employees	801	2,168	1,368		1,36
1.B.2. Investment income, net	-6,734	-6,485	248	-45	29
I.B.2.1. Direct investment income, net	-4,157	-3,921	237		23
1.B.2.2. Portfolio investment income, net	-1,749	-2,387	-638	-643	
1.B.2.3. Other investment income, net	-828	-826	2	-50	į
L.B.2.4. Reserve assets, net	0	648	648	648	
1.B.3. Other primary income, net	0	1,410	1,410	1,453	-4
L.C. Secondary income	1,062	-554	-1,617	-1,453	-16
2. Capital account	3,392	3,641	249	106	14
2.1. Gross acquisitions/disposals of non-produced non-financial assets	-50	49	99	106	-
2.2 Capital transfers	3,442	3,592	150	0	15
3. Financial account (net assets)	7,266	7,178	-89	0	-8
3.1. Direct investment (net assets)*	-615	-373	242	0	24
Assets	3,793	3,689	-104	0	-10
Equity	1,341	1,146	-195	0	-19
Debt instruments	2,452	2,543	91	0	9
iabilities	4,408	4,063	-346	0	-34
Equity	3,914	3,589	-325	0	-33
Debt instruments	495	474	-21	0	-2
3.2. Portfolio investment (net assets)	-3,140	-3,073	67	0	(
Assets	-420	-351	68	0	(
iabilities	2,720	2,722	2	0	
3.3. Financial derivatives and employee stock options (net assets)	-576	-579	-2	0	
Assets	-3,893	-3,893	0	0	
iabilities	-3,317	-3,314	2	0	
3.4. Other investment (net assets)	10,388	9,993	-395	0	-39
Assets	-67	-200	-133	0	-13
Liabilities	-10,456	-10,193	262	0	26
3.5. Reserve assets	1,210	1,210	0	0	
I. Net errors and omissions	934	-625	-1,559	-180	-1,37
Current and capital account	6,332	7,803	1,470	180	1,29
Financial account	7,266	7,178	-89	0	
Direct investment according to the	direction of inv	estments			
3.1. Direct investment (net assets)	-615	-373	242	0	24
Direct investment abroad (net assets)	1,701	1,283	-418	-255	-10
Equity (net assets)	1,341	1,147	-194	0	-19
Equity other than reinvestment of earnings	731	663	-67	-112	
Reinvestment of earnings	610	484	-127	112	-2
Debt instruments	360	136	-224	-255	:
Direct investment in Hungary (net liabilities)	2,316	1,656	-660	-255	-4
Equity	3,914	3,590	-324	0	-3
Equity other than reinvestment of earnings	2,702	2,171	-531	-682	1
Reinvestment of earnings	1,212	1,419	207	682	-4
Debt instruments	-1,597	-1,934	-336	-255	_

Table 10 Changes in stocks

(without SPEs, in EUR million)

2013	BPM5	BPM6 (september	Difforonco	of which	
2013	DPIVIO	2014)			Revisions
3.1. Direct investment (net assets)	-51,865	-50,214	1,652	0	1,652
Assets	45,850	46,813	964	0	964
Equity	26,475	27,233	759	0	759
Debt instruments	19,375	19,580	205	0	205
Liabilities	97,715	97,027	-688	0	-688
Equity	67,868	67,011	-857	0	-857
Debt instruments	29,847	30,016	169	0	169
3.2. Portfolio investment (net assets)	-44,166	-44,023	143	29	114
Assets	5,721	5,835	114	0	114
Liabilities	49,886	49,858	-28	-29	1
3.3. Financial derivatives and employee stock options (net assets)	-1,032	-1,038	-6		-6
Assets	2,678	2,679	1		1
Liabilities	3,710	3,718	7		7
3.4. Other investment (net assets)	-27,927	-30,415	-2,488	-1,138	-1,350
Assets	17,017	17,123	106	0	106
Liabilities	44,944	47,538	2,594	1,138	1,456
3.5. Reserve assets	33,782	33,782	0	0	0
Net IIP (net asset)	-91,208	-91,907	-699	-1,109	410
Assets	105,047	106,233	1,185	0	1,186
Liabilities	196,255	198,140	1,885	1,109	776
Net external debt (incl FDI debt)	44,968	47,770	2,802	1,488	1,314
External assets in debt instruments (incl FDI debt)	71,445	71,377	-68	-379	311
Gross external debt (incl FDI debt)	116,413	119,147	2,734	1109	1,625
Net external debt (excl FDI debt)	34,496	37,334	2,838	1,488	1,350
External assets in debt instruments (excl FDI debt)	52,070	51,797	-273	-379	106
Gross external debt (excl FDI debt)	86,566	89,131	2,566	1109	1,457
Stock of Direct investments according	to the direction o	of investmen	ts		
3.1. Direct investment (net assets)	-51,865	-50,214	1,652	0	1,652
Abroad (net assets)	28,774	28,010	-764	-1,567	803
Equity	26,475	27,230	755		755
Debt instruments	2,299	780	-1,519	-1,567	48
In Hungary (net liabilities)	80,639	78,223	-2,416	-1,567	-848
Equity	67,868	67,007	-861		-861
Debt instruments	12,771	11,217	-1,555	-1,567	12

# **Annex 1**

# Data collection for the compilation of the balance of payments statistics by subject area<sup>13</sup>

Direct investm	Direct investment					
Code of data collection	Description of data collection	Frequency	Reporting deadline			
R02	Monthly report on direct investments - nonfinancial corporations, insurance corporations, pension funds, central government, local governments, social security funds and non-profit institutions serving households	designated, monthly	10th working day of the month following the reference period			
R03	Monthly report on direct investments - other monetary institutions, other financial intermediaries and providers of auxiliary financial services	designated, monthly	10th working day of the month following the reference period			
R12	Quarterly report on direct investments - nonfinancial corporations, insurance corporations, pension funds, central government, local governments, social security funds and non-profit institutions serving households	quarterly	10th working day of the month following the reference period			
R13	Quarterly report on direct investments - other monetary institutions, other financial intermediaries and providers of auxiliary financial services	quarterly	10th working day of the month following the reference period			
R27	Real estate investments of resident natural persons abroad	yearly	10th working day of the March following the reference period			
R29	Annual report on direct investments	yearly	30 June of the year following the reference period			
R43	Ad hoc data supply of economic associations with foreign investor, to be terminated as part of a transformation (final asset statement), the legal successor of an economic association with a foreign investor belonging to the company group, and the amount of the total shareholders' equity allocated to the foreign investor, is at least 1 billion HUF as of the day of transformation, or is less than minus 1 billion HUF.	ad hoc	the 150th day following the day of transformation			

Portfolio investment					
Code of data collection	Description of data collection	Frequency	Reporting deadline		
R04	Portfolio investment		10th working day of the month following the reference period		

Financial derivatives					
Code of data collection	Description of data collection	Frequency	Reporting deadline		
R05	Monthly report on financial derivatives	designated, monthly	10th working day of the month following the reference period		
R14	Quarterly report on financial derivatives	quarterly	10th working day of the month following the reference period		

<sup>&</sup>lt;sup>13</sup> According to the directive of the Governor of Magyar Nemzeti Bank <a href="http://www.mnb.hu/en/statistics/information-for-data-suppliers/regulations-">http://www.mnb.hu/en/statistics/information-for-data-suppliers/regulations-</a> and-resolutions (except for data taken over from HCSO, where the OSAP is the legal basis of data takeover).

Code of data collection	Description of data collection	Frequency	Reporting deadline
R06	Monthly report on other investment - nonfinancial corporations, insurance corporations and pension funds as well as non-profit institutions serving households	designated, monthly	10th working day of the month following the reference period
R07	Monthly report on other investment - other monetary institutions	designated, monthly	10th working day of the month following the reference period
R08	Monthly report on other investment - other financial intermediaries and providers of auxiliary financial services	designated, monthly	10th working day of the month following the reference period
R09	Monthly report on other investment - central government, local governments and social security funds	designated, monthly	10th working day of the month following the reference period
R10	Syndicated loans	designated, monthly	10th working day of the month following the reference period
R15	Quarterly report on other investment - nonfinancial corporations, insurance corporations and pension funds as well as non-profit institutions serving households.	quarterly	10th working day of the month following the reference period
R16	Quarterly report on other investment - other monetary institutions	quarterly	10th working day of the month following the reference period
R17	Quarterly report on other investment - other financial intermediaries and providers of auxiliary financial services	quarterly	10th working day of the month following the reference period
R20	Maturity breakdown of long-term liabilities - nonfinancial corporations, insurance corporations and pension funds, non-profit institutions serving households, other financial intermediaries and providers of auxiliary financial services	quarterly	10th working day of the month following the reference period
R21	Maturity breakdown of long-term assets and liabilities - other monetary institutions	quarterly	10th working day of the month following the reference period
R22	Maturity breakdown of long-term liabilities - central government, local governments and social security funds	quarterly	10th working day of the month following the reference period
R25	Guarantees assumed by the state	quarterly	51st day after the reference period
R26	Stock and flow data for claims on and liabilities to non- residents concerning VAT accounts kept in EUR	quarterly	10th working day of the month following the reference period
R28	Annual report on certain data of the stocks and flows of the long-term debt of the state, of economic organisations with majority state participation, as well as of economic organisations in which the state does not have majority participation but that have long-term state guaranteed liabilities to non-residents	yearly	32th working day of the year following the reference period
R39	Early repayments on loans with original maturity of more than one year	yearly	32th working day of the year following the reference period

Unrequited transfers and non-produced, nonfinancial assets					
Data collection code	Description of data collection	Frequency	Reporting deadline		
R11	Monthly report on transfers and non-produced nonfinancial assets	designated, monthly	10th working day of the month following the reference period		
R18	Quarterly report on transfers and non-produced nonfinancial assets - nonfinancial corporations, insurance corporations and pension funds, other monetary institutions, other financial intermediaries and providers of auxiliary financial services, based on designation,	designated, monthly	10th working day of the month following the reference period		

Balance sheet data for information					
Code of data collection	Description of data collection	Frequency	Reporting deadline		
R19	Supplementary balance sheet data of nonfinancial corporations	designated, quarterly	30th day following the reference period		

Registry data	Registry data					
Code of data collection	Description of data collection	Frequency	Reporting deadline			
R01	Registry information on non-resident partners involved in direct investments	designated, ad hoc R02, R03, R12, R13 or R29 is submitted for the first time, and subsequently in the event of a change in data	in respect of reports R02, R03, R12 or R13, the 9th working day after the month following the reference period of the report; in respect of report R29, 20 June of the year following the reference period of the report.			
R24	Quarterly report on certain data of the long-term debt of the state, of economic organisations with majority state participation, as well as of economic organisations in which the state does not have majority participation but that have long-term state guaranteed debt to non-residents	quarterly	10th working day of the month following the reference period			
R38	Credit and debit entries of resident, non-bank counterparties due to foreign transactions (HUF and foreign currency)	quarterly	last working day of the month following the reference period			

Data taken over from HCSO					
Code of data collection	Description of data collection	Frequency	Reporting deadline		
R52	Trade in goods between resident and non-resident units	monthly	43rd day after the reference period		
R33	Travel	quarterly	60th day after the reference period		
R54	Trade in services between resident and non-resident units	quarterly	60th day after the reference period		
R36	Current and capital transfers, compensation of employees between resident and non-resident units	quarterly	60th day after the reference period		
R55	Non-resident FISIM revenues and expenses	quarterly	55th day after the reference period		

# Annex 2

#### Notes on the classification of data of 1990-1994 in a new structure

We have assigned the data with a narrower breakdown to instrument for the period between 1990 and 1994 under lines according to the new methodology. This classification is not always straightforward, and therefore we present the applied procedure for information.

The Export, Import and Trade balance has been transferred to 1.A.a. Goods, in the credit, debit and net lines, respectively.

- The net item of Freight and other transportation services is recorded in the 1.A.b.3. Transportation, net.
- Government payments, net, are recorded in line 1.A.b.12 Government goods and services, net line.
- Services, net, have become part of the balance of *1.A.b.10 Other business services* (together with Labour and property income and Other compensation, net).
- Foreign direct investment income has been transferred to 1.B.2.1 Direct investment income, net.
- Income of interests and financial investment is distributed between 1.B.2.2. Portfolio investment income and 1.B.2.3. Other investment income. Credit is calculated as an average figure from the 1995 transaction data, while debits are distributed in the proportion of data consistent with the Financial Accounts.
- Labour and property income, net has become part of 1.A.b.10. Other business services, net, because in this line we primarily recorded transactions related to operational lease.
- Transfers were distributed by estimating between 1.C. Secondary income and 1.A.b.4. Travel, on a model basis.
- Other Payments, net have become part of 1.A.b.10. Other business services, balance (see believe).
- The Current account balance corresponds to *I. Current account, net* in the new structure.

The elements of the old capital account are recorded in the following lines.

- Medium and long-term capital movements and short-term capital movement assets have been placed in 3.4.k. Other investment assets, with a factor of -1.
- Medium and long-term capital movements and short-term capital movements liabilities are recorded in 3.4.t. Other investments, liabilities and 3.2.t. Portfolio investment, liabilities in the ratio of the stock data of the financial accounts.
- Foreign direct investment in Hungary, net, and abroad, net, are recorded in line 3.1.t. Foreign direct investment (liabilities) and on line 3.1.k. Foreign direct investment (assets), respectively, this latter with a factor of -1.
- Changes in international reserves are presented in 3.5. Reserve assets with a factor of -1.

The stock data are presented according to the hierarchy of BPM6 in the following structure.

- Among assets, international reserves in convertible currency are recorded in 3.5. Reserve assets, and gold is recorded as part of that, in line 3.5.1.k. Monetary gold.
- Other foreign assets with short and medium maturity held in convertible currencies are recorded in 3.4.k. Other investments.
- In the new structure Direct investment abroad corresponds to 3.1.k. Direct investment.
- Within liabilities, all loans (financial, commercial, inter-governmental, other) have been transferred to 3.4.t Other investment, with the exception of the part consistent with the Financial accounts, which will be part of 3.2.t. Portfolio investment within loans. Therefore all the 'old' loan liabilities consist of the stock of Other investment and Portfolio investment liabilities.

# **Appendix**

#### Example for the compilation of the Balance of Payments and International Investment Position

In the following example, the balance of payments and international investment position of Heaven has been compiled from the given transactions in point I.1. and terms in II.1.

The official currency of Heaven is the farthing, and statistics are compiled in this currency. Financial transactions of economic units are made through their domestic banks' accounts. Notes for the recordings are available at the end of the tables.

#### I. COMPILATION OF THE BALANCE OF PAYMENTS

#### I.1. Transactions of Heaven with non-residents

- 1. Enterprises in Heaven exported cars. The 10,239 million crowns received for these exports was credited on the nostro accounts of the resident commercial banks, held abroad.
- 2. During the year, 35,609 million farthings were spent on food imports, which was paid from the foreign nostro account of the domestic banks in the value of 11,599 million crowns.
- 3. Relating to the imports of goods, 3,849 million crowns, the equivalent of 11,432 million farthings, were debited on the foreign nostro accounts of resident banks as payment for the services on non-resident transportation companies.
- 4. In Heaven, tourists from Hell exchanged and spent 4,333 million crowns during their stay.
- 5. The government of Heaven provided pharmaceutical aid worth 318 million farthings to Hell, which was afflicted by a natural disaster.
- 6. Migrant workers from Heaven working in Hell sent remittances of 56 million crowns to their families in the home country.
- 7. In the form of direct borrowing, the enterprises of Heaven raised 1,300 million crowns during the year.
- 8. The 100% non-resident-owned direct investments in Heaven had 4,000 million farthings of after-tax profits in the reference year.
- 9. Dividends of 2,709 million farthings were declared and remitted to their home countries by non-resident direct investors.
- 10. On portfolio investments, Heaven recorded interest income of 1,067 million crowns.
- 11. The government of Heaven issued bonds, of which non-residents subscribed 100 million farthings.
- 12. The government privatised 49% of the Post Office, the non-resident investor paid 1,500 million crowns for the equity.

- 13. Enterprises resident in Heaven also raised funds from abroad in the form of share issues, in the aggregate amount of 301 million farthings.
- 14. The commercial banks of Heaven forgave 51 million farthings of the debt of Hell.
- 15. Resident investors declared no dividends in the reference year; they placed after-tax profits of 540 million crowns in profit reserves in their non-resident enterprises.
- 16. The residents of Heaven buy Hell-bonds worth 300 million crowns.

# I.2. Value of transactions in farthing and crown, at the exchange rate related to the transactions

	Million crowns	Million farthings	farthing/crown
1. car exports	10,239	30,717	3.00,
2. food exports	11,599	35,609	3.07,
3. imports of transportation services	3849	11,432	2.97,
4. exports of travel	4333	12,609	2.91,
5. provision of pharmaceutical aid	104	318	3.07,
6. migrants' remittances	56	166	2.97,
7. corporate borrowing	1300	3900	3.00,
8. after-tax profits for the year (reinvested earnings)	1329	4000	3.01,
9. dividends declared and distributed	897	2709	3.02,
10. portfolio investment income	1067	3201	3.00,
11. government bonds issued	34	100	2.94,
12. privatisation receipts	1500	4500	3.00,
13. share issues	100	301	3.01,
14. debt forgiveness	17	51	3.00,
15. reinvested earnings	540	1620	3.00,
16. bonds purchased	300	936	3.12,

### Notes to Table I.2.

For the compilation of statistics, transactions in different currencies must be converted into a common currency, which is the currency of compilation. This currency serves to aggregate the various individual transactions at the level of the national economy. Countries generally use their official legal tender to assure accounting consistency.

For the conversion, the best exchange rate is the one prevailing at the time of the transaction (transaction exchange rate), but in practice its availability to statisticians depends on the data collection system used. If the transaction exchange rate is unavailable, it can be replaced by some average rate to determine the value of the transaction in the currency of aggregation. The closer the selected average exchange rate is to the actual transaction exchange rate, the better the approximation of the converted value of the transaction to the actual market value. Thus, for instance, conversion at the daily average rate yields a better reflection of the market value of the transaction than the use of weekly or monthly averages.

### I.3. Components of the Balance of Payments - transaction pairs

Million farthings	Credit	Debit
1. goods	30,717	
1. claims of commercial banks, deposit		30,717
2. goods		35,609
2. claims of commercial banks, deposit	35,609	
3. transportation services		11,432
3. claims of commercial banks, deposit	11,432	
4. travel	12,609	
4. claims of commercial banks, deposit		12,609
5. goods	318	
5. secondary income (current transfer)		318
6. claims of commercial banks, deposit		166
6. secondary income (current transfer)	166	
7. other investment, liabilities, loans	3,900	
7. claims of commercial banks, deposit		3,900
8. reinvested earnings (income)		4,000
8. reinvestment of earnings in Heaven (financial account)	4,000	
9a dividends (declared)		2,709
9a liabilities to shareholders	2,709	
9b reinvested earnings (income)		-2,709
9b reinvestment of earnings (financial account)		2,709
9c liabilities to shareholders (dividend payment)		2,709
9c. claims of commercial banks, deposit	2,709	
10. portfolio investment income	3,201	
10. claims of commercial banks, deposit		3,201
11. portfolio investment, liabilities, bonds	100	
11. reserve assets		100
12. direct investment in Heaven	4,500	
12. reserve assets		4,500
13. portfolio investment, equity securities, liabilities	301	
13. claims of commercial banks, deposit		301
14. other investment, assets, loans	51	
14. capital transfer		51
15. reinvested earnings (primary income)	1,620	
15. reinvestment of earnings abroad (financial account)		1,620
16. portfolio investment, assets, bond		936
16. claims of commercial banks, deposit	936	
TOTAL	114,878	114,878

Notes to Table I.3.

Table I.3. shows the transaction pairs corresponding to the individual transactions in the currency of aggregation, based on Table I.2. Following from the principle of double entry system, each transaction is recognised in the balance of payments twice: as a debit and credit item. (In this respect the recognition of reinvested earnings relating to dividends declared is given special treatment (9b), as it is substantively linked to the adjustment of reinvested earnings recognised in a previous period (when the profit was earned and not withdrawn from the enterprise): this explains the negative sign in the income account as well. The corresponding entry in the financial account is withdrawal of equity. In line with the principles of double entry book-keeping, the two sides of the balance sheet must be equal. In case of transactions where the underlying transaction has no offsetting counterpart (5 and 14), the 'other leg' of the transaction is a current or capital transfer.

As the example provides that the resident economic entities of Heaven conduct their financial transactions through their resident banks (and the state through the central bank, therefore in transactions 11 and 12 the financial instrument involved is international reserves), transactions with the rest of the world are reflected in the change of the net external position of the monetary institutions. In the bank's balance sheet the increase in claims on the rest of the world is offset by an increase in liabilities to residents, as the account of the enterprise kept in the bank is credited, but balance of payments and international investment position statistics record transactions and positions vis-a-vis the rest of the world.

# I.4. Balance of payments of Heaven (BPM5 presentation - before 2014)

Million farthings	Credit	Debit	Net
I. Current account	48,631	51,359	-2,728
Goods	31,035	35,609	-4,574
Services	12,609	11,432	1,177
Travel	12,609	0	12,609
Transportation services	0	11,432	-11,432
Income	4821	4000	821
Direct investment income	1620	4000	-2380
Distributed and remitted income (dividend)	0	2709	-2709
Reinvested earnings	1620	1291	329
Portfolio investment income	3201	0	3201
Current transfers	166	318	-152
II. Capital account	0	51	-51
Capital transfers of other sectors	0	51	-51
III. Financial account	66,247	63,468	2779
Direct investment	11,209	7038	4171
Rest of the world	0	1620	-1620
Reinvested earnings	0	1620	-1620
in Heaven	11,209	5418	5791
Shares and other equity	4500	0	4500
Reinvested earnings	4000	2709	1291
Other capital	2709	2709	0
Liabilities	2709	2709	0
Portfolio investment	401	936	-535
Assets	0	936	-936
Bonds and notes	0	936	-936
Liabilities	401	0	401
Equity securities	301	0	301
Bonds and notes	100	0	100
Other investment	54,637	50,894	3743
Assets	50,737	50,894	-157
Liabilities	3900	0	3900
International reserves	0	4600	-4600
IV. Balance of payments total	114,878	114,878	0

#### Notes to Table I.4.

Table I.4. contains data in the structure that will be familiar to users from the standard now replaced (BPM5). This table shows the transaction pairs of Table I.3. in the structure of the balance of payments. Departing from the standard publication compiled according to BPM5, however, this table contains the financial account items with gross amounts rather than as a balance. This enables the interested readers to identify the items in the financial account in Table I.3. (For instance, the way the increase in

assets (debit item) is recorded as expenditure, with a negative balance (cf. the increase of reserves as a result of privatisation receipts and bond issue, transactions 11 and 12).

# I.5. Balance of payments of Heaven (BPM6 presentation - from 2014)

Million farthings	Credit	Debit	Net
I. Current account	48,631	51,359	-2,728
Goods	31,035	35,609	-4,574
Services	12,609	11,432	1,177
Travel	12,609	0	12,609
Transportation services	0	11,432	-11,432
Primary income	4821	4000	821
Direct investment income	1620	4000	-2380
Distributed and remitted income (dividend)	0	2709	-2709
Reinvested earnings	1620	1291	329
Portfolio investment income	3201	0	3201
Secondary income	166	318	-152
II. Capital account	0	51	-51
Capital transfers of other sectors	0	51	-51
	Assets	Liabilities	Net assets
III. Financial account	7313	10,092	-2779
Direct investment	1620	5791	-4171
Abroad	1620	0	1620
Reinvestment of earnings	1620	0	1620
in Heaven	0	5791	-5791
Equity	0	4500	-4500
Reinvestment of earnings	0	1291	-1291
Debt insruments	0	0	0
Portfolio investment	936	401	535
Debt securities	936	100	836
Equity securities	0	301	-301
Other investment	157	3900	-3743
Reserve assets	4600	0	4600
Memo:			
Net external financing capacity from "above" [I.+II.]			-2779
Net external financing capacity from "below" [III.]			-2779

#### Notes to table I.5.

Table I.5. presents how the revised methodological standards (BPM6) parts in the aggregate presentation of the balance of payments with the previous (BPM5) presentation practice, which corresponds to the sign convention that continues to apply at elementary level: in the financial account the balances show a positive or negative sign depending on whether they are increased or decreased in the case of assets and liabilities as well. As a result of the change implemented in aggregate presentation, the net external financing capacity (net lending/borrowing) calculated from 'below' and from 'above' shows the changes in net external position due to transactions in the same way and are not opposites of each other. Considering its nature, in this way the balance of the financial account is a net asset indicator (changes in liabilities are deducted from changes in assets). (In the aggregate presentation according to BPM5 the balance of the financial account was the exact opposite of the combined balance of the current account and the capital account, therefore considering its content it was a net liability type indicator).

### II. COMPILING THE INTERNATIONAL INVESTMENT POSITION OF HEAVEN

# II.1. Factors and circumstances affecting the International Investment Position of Heaven

1. Farthing/crown at the end of the previous period	2.87
2. Farthing/crown at the end of the reference period	3.15
3. All assets and other investment debts are denominated in crowns, all liabilities other than these in farthings	
4. On the asset side the price change of the portfolio bond (in farthing) is	6%
5. The prices of shares in portfolio investment assets are unchanged.	
6. On the liability side, the ratio of shares in the opening portfolio is	90%
7. Change of the price of shares issued earlier on the liability side, compared to the end of the previous month	-12%
8. The price of the bond on the liability side did not change	
9. Write-off of doubtful loan receivables at the end of the reference period (million crown)	100
10. The level of opening positions is optional	

#### II.2. International Investment Position of Heaven

	Position	Change in stocks				D. Willer	
DESCRIPTION	at beginning of year	Balance of transactions	Exchange rate changes	Price changes	Other changes in stocks	Total	Position at end of year
	(1)	(2)	(3)	(4)	(5)	(6)=(2++5)	(7)=(1+6)
		ASS	ETS				
1. Direct investment	2,587	1,620	333	0	0	1,953	4,540
2. Portfolio investment	6,987	936	691	517	0	2,143	9,130
3. Other investment	582	157	1,263	0	-315	1,106	1,688
4. Reserve assets	9,854	4,600	1,194	0	0	5,794	15,648
Assets total	20,010	7,313	3,481	517	-315	10,996	31,006
		LIABII	LITIES				
1. Direct investment	4,598	5,791	0	0	0	5,791	10,389
2. Portfolio investment	3,598	401	0	-389	0	12	3,610
3. Other investment	1,458	3,900	337	0	0	4,237	5,695
Liabilities total	9,654	10,092	337	-389	0	10,041	19,695
NET ASSETS							
1. Direct investment	-2,011	-4,171	333	0	0	-3,838	-5,849
2. Portfolio investment	3,389	535	691	905	0	2,131	5,520
3. Other investment	-876	-3,743	926	0	-315	-3,132	-4,008
4. Reserve assets	9,854	4,600	1,194	0	0	5,794	15,648
Net assets total	10,356	-2,779	3,144	905	-315	955	11,311

#### Notes to Table II.2.

The international investment position presents, starting from the opening level and through the recognition of changes during the period, the closing level of the financial claims on and liabilities to the rest of the world expressed in the currency of aggregation. The lines of the table show the standard functional categories of the balance of payments, while the columns contain the changes in the financial positions (stocks) during the period.

Stocks of financial assets and liabilities denominated in foreign currencies are converted to the currency of aggregation at the exchange rate prevailing at the end of the reference period. The opening stock of a period is identical to the closing stock of the preceding period. Thus, the exchange rate prevailing at the end of the previous period is used to calculate the opening stock level. (As in the example the value of the opening positions is optional, this is irrelevant for the definition of their value.)

The closing position is identical to the closing position of the preceding period (= opening position of the current period) plus the changes during the current period.

The balance of the transactions is identical to the balances in the financial account of the balance of payments and its sign depends on its contribution to the stock change: it is '+' if it increases the stock and '-' if it decreases it. After the BPM6 changeover, it is the same as the convention on signs for both assets and liabilities applicable in the balance of payments.

Considering that financial assets and other investment liabilities relate to instruments denominated in crowns; their value expressed in the currency of aggregation is influenced by the crown/farthing exchange rate in the period concerned. This depends on two components. The value of positions converted to the currency of aggregation is affected, on the one hand, by the relative change of exchange rates at the end of the period (if no change occurs during the period to alter the values denominated in the original currency, the value expressed in the currency of aggregation changes if the period-end exchange rate is different from the one prevailing at the end of the previous period). On the other hand, by the difference between the exchange rate applicable to changes during the period and the exchange rate at the end of the period (for instance, transactions are aggregated in the balance of payments at the transaction exchange rate or some average exchange rate, thus their value at the period-end exchange rate, which is used for their recognition in the IIP, will differ by the difference between the transaction exchange rate or average exchange rate and the period-end exchange rate). Technically, these are called exchange rate changes relating to stocks and to flows, respectively. Essentially, different exchange rates are used for the conversion of flows recorded in the currency of denomination; moreover, period-end exchange rates also tend to change as in relative terms. Therefore, in order to satisfy the requirement of the reconciliation between opening stock, closing stock and changes in the period, the effects of exchange rate fluctuations must be taken into account. Clearly, for stocks of financial assets where the currency of denomination and aggregation is identical, there is no change arising from exchange rate fluctuations (in the example, the direct investments and portfolio investments on the liability side).

The price changes of market instruments (bond price, share price) has a similar effect on the value of stocks as the revaluation resulting from exchange rate fluctuations. If the market price of a financial asset changes, the value of the net financial worth to take into account also changes. In the case of assets denominated in foreign currencies, this is combined with the effects of exchange rate fluctuations (in the example, see the change in the price of the bond assets denominated in crowns), but such a revaluation also occurs in the case of stocks denominated in the currency of aggregation (see the portfolio shares on the liability side in the example).

Of the elements of the change in net worth, the other changes in stock category must be used if the creditor writes off its claim against the debtor by a unilateral decision. That is, it is not debt forgiveness occurring as a result of a bilateral agreement between the borrower and creditor (see transaction 14 in the example), which is a transaction to be recorded in the balance of payments, but a unilateral decision by the creditor. The write-off of some of the claim reduces the value of the assets recorded. This decline is reflected in the other change in stock column. As in the example the crown-denominated claim is written off at the end of the period, no specific exchange rate difference needs to be recognised for this change.

Concept	Explanation
debt financial instruments	Debt instruments are those financial instruments that incur a principal repayment and/or interest payment liability at a future date(s). The following financial instruments (assets and liabilities) belong to debt instruments: SDR, cash and deposits, debt securities, loans, insurance technical reserves, pension fund fee reserves, standardised guarantees, other assets and liabilities, including trade credits.
VAT registration	A resident tax number created by a non-resident company for VAT payment. There is no actual resident economic agent behind the tax number.
capital in transit	When a resident, non-SPE company belonging to a multinational company group passes on received capital within the company group, while also performing its regular activity (production, service provision). This increases the total value of capital inflows and outflows in the statistics, but similarly to the activities of SPEs, this flow of capital has no effect on the economy of the given country.
COPC adjustment	Filtering out from the earnings of the company the income created by 'extraordinary' items outside the current operation. Dividing the value of the profits of the company depending on its statistical effect among income, revaluation or other volume change. In the current account only the earnings related to current operation (current operating performance concept, COPC) should be considered as earnings.
asset portfolio restructuring	A multinational corporation reorganises its asset portfolio in a cross-border fashion: for example with liquidating one subsidiary, establishing a new subsidiary or contributing assets into another subsidiary. We classify into this category those transactions as well when the company court registers capital that has been paid by the investor but not yet subscribed, i.e. treated and filtered out as capital in transit.
external international financing capacity/need	The measure of external balance, the aggregate balance of the current account and the capital account. Owing to the theoretical identity of the balance of payments, the value calculated that way ('from above') will be the same as the balance of the financial account (the financing capacity/need 'calculated from below'). In practice, the difference between the indicators calculated by these two methods is the net errors and omissions NEO (statistical error).
reverse investment	Reverse investment is created when a direct investment enterprise lends funds or invests capital in its own direct or indirect investor, assuming that the reverse investor does not reach the 10% voting power
superdividend	Outstanding(ly high) dividend payouts, which the company pays to its shareholders from the accumulated retained earnings, or if dividend is higher than calculated with regular course of business, must be recorded not as dividend, rather as a withdrawal of capital under the new methodology.
SPE	These are resident enterprises that basically perform their activities abroad, their connection with the domestic economy is minimal. They are primarily involved in the intra-multinational group intermediation of financial resources, however, their parent companies regulate the direction and amount of the funds flowing through them. They are not targets for direct investment: their net investment registered through various financial instruments is close to zero over longer periods of time.
enterprise group	A group of enterprises that has the same ultimate investor. Those enterprises that are directly or indirectly under the control or influence of the same – ultimate – investor (control here means that the voting power ensures over 50% of and influence means that the voting power at least 10% but not more than 50%).
ultimate investor	A majority investor – one that holds voting power exceeding 50% directly or indirectly – at the peak of the ownership chain of the company group, over which no other investor exercises control. The ultimate investor may be a resident or non-resident individual, legal person or organisation without legal personality, a direct investor or indirect investor.

### **REFERENCES**

Press releases of MNB on balance of payments statistics:

http://english.mnb.hu/Statisztika/data-and-information/mnben\_statkozlemeny

Time series of balance of payments and international investment position:

http://english.mnb.hu/Statisztika/data-and-information/mnben\_statisztikai\_idosorok/mnben\_elv\_external\_trade/balance-of-payments-international-investment-postion

Time series of foreign direct investments:

http://english.mnb.hu/Statisztika/data-and-information/mnben\_statisztikai\_idosorok/mnben\_elv\_external\_trade/foreign-direct-investments

#### Methodological notes:

http://english.mnb.hu/Root/Dokumentumtar/ENMNB/Statisztika/mnben\_statisztikai\_idosorok/mnben\_BPM6\_FDI/BOP\_meth\_notes\_BPM6\_EN.pdf

European Union balance of payments/international investment position statistical methods, ECB May 2007: <a href="http://www.ecb.int/pub/pdf/other/bop">http://www.ecb.int/pub/pdf/other/bop</a> 052007en.pdf

IMF BOPCOM:

http://www.imf.org/external/bopage/bopindex.htm

IMF: Balance of Payments: Selected Publications <a href="http://www.imf.org/external/np/sta/bop/biblio.htm">http://www.imf.org/external/np/sta/bop/biblio.htm</a>

The Special Data Dissemination Standard: Guide for Subscribers and Users, IMF 2007 <a href="http://www.imf.org/external/pubs/ft/sdds/guide/2007/eng/sddsguide.pdf">http://www.imf.org/external/pubs/ft/sdds/guide/2007/eng/sddsguide.pdf</a>

Balance of Payments and International Investment Position Manual Sixth Edition, IMF 2009 (BPM6) <a href="https://www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf">https://www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf</a>

BPM6 by chapter:

http://www.imf.org/external/pubs/ft/bop/2007/bopman6.htm

Balance of Payments (BPM6) Compilation Guide, IMF 2014 <a href="http://www.imf.org/external/pubs/ft/bop/2014/pdf/Guide.pdf">http://www.imf.org/external/pubs/ft/bop/2014/pdf/Guide.pdf</a>

External Debt Statistics: Guide for Compilers and Users (BPM6), IMF 2014 http://www.tffs.org/pdf/edsg/ft2014.pdf

BPM6 conversion matrix

http://www.imf.org/external/pubs/ft/bop/2007/pdf/matrix.pdf

Balance of Payments Manual 5th Edition, IMF 1993 http://www.imf.org/external/np/sta/bop/BOPman.pdf

Balance of Payments Textbook (BPM5), IMF 1996 http://www.imf.org/external/np/sta/bop/BOPtex.pdf

Balance of Payments Compilation Guide (BPM5), IMF 1995 http://www.imf.org/external/np/sta/bop/BOPcg.pdf External Debt Statistics: Guide for Compilers and Users (BPM5), IMF 2003

http://www.imf.org/external/np/sta/ed/guide.htm

The on-line database of IMF:

http://elibrary-data.imf.org/ (BOP = balance of payments database)

SNA 2008:

http://unstats.un.org/unsd/nationalaccount/sna2008.asp

OECD Benchmark Definition of FDI 4th Edition

http://www.oecd.org/dataoecd/26/50/40193734.pdf

OECD Benchmark Definition 3rd Edition:

http://www.oecd.org/daf/inv/investment-policy/2090148.pdf

World Bank database:

http://databank.worldbank.org/ddp/home.do

Eurostat database:

http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\_database

EKB database:

http://sdw.ecb.europa.eu/browse.do?node=2018790

OECD database:

http://www.oecd.org/document/8/0,3746,en\_2649\_34529562\_40930184\_1\_1\_1\_34529562,00.html

UNCTAD database:

http://unctadstat.unctad.org/EN/

# HUNGARY'S BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION STATISTICS

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