HUNGARY'S BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION STATISTICS 2012

MAGYAR NEMZETI BANK

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(international methodology and national practice)

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Introduction

The Magyar Nemzeti Bank Statistics published the *Balance of Payments Statistics of Hungary*[1] in 2006 to provide information to a wide range of users on the international methodology of the balance of payments statistics and international investment position and to explain the method of compilation of such statistics in Hungary.

Since 2006, there have been two developments that justify the republication of this booklet: in 2008 major changes were implemented in national procedures and the revision of international methodologies was completed. The detailed explanation of the international methodology in this publication was deemed particularly necessary as the methodological standards of the International Monetary Fund applicable to the balance of payments (IMF Balance of Payments Manual, BPM) are not available in Hungarian.

The publication sets out to present and explain the key concepts and conventions relating to balance of payments statistics and the international investment position as well as the structure of statistical reports. The explanation of the relationship with the system of national accounts is imperative for the understanding of the system of macroeconomic statistics and in particular of the role of balance of payments statistics.

Furthermore, in the chapter describing the international methodology, the publication offers an insight, in the same structure as in the previous paper but at greater length, into the process of the review of the international methodology and the most notable changes, also summarising the key elements of the methodology to be implemented in the near future.

At present, the 5th edition of the balance of payments manual of the International Monetary Fund (BPM5) is in force. The discussion of the new version of the international methodology (BPM6) in this paper is limited because even though the review was completed in 2008, the changeover to the new methodology has not started yet. The date for the changeover approved by the EU Member States is 2014. That is because within the EU, the European System of Accounts (ESA 2010) revised in line with the system of national accounts will become effective in 2014, and accordingly, BPM6 will also be introduced at that time. The MNB also plans full conversion to the BPM6 accordingly. Therefore, this publication presents the currently effective international methodology, also explaining the new methodology in brief.

We also set out to explain, in addition to the international methodology, the practice followed in Hungary. The introduction and operation of the data collection system relying on direct reporting by corporations, to replace data collection based primarily on the reports of resident banks, and the resulting changes are explained in detail in Chapter 2.

The MNB website always discloses the most recent balance of payments and international investment position figures, therefore there is no annex to this booklet devoted specifically to statistical figures.

After the main body of the paper, however, 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.

The various chapters of the publication were written by staff members of Magyar Nemzeti Bank Statistics working on balance of payments, namely: Péter Bánhegyi, Mihály Durucskó, Magdolna Kanyóné Pető, Beáta Montvai, Zsuzsanna Sisakné Fekete, Vanda Tánczos and Erika Veitzné Kenyeres, while the data and tables available on the MNB website were compiled by János Basa and Gyöngyi Lipcsei.

1 Even though this time the title clearly indicates that our subject goes beyond balance of payments statistics, the plural form balance of payments statistics is meant to include not only the balance of payments itself but also international investment position statistics.

List of acronyms

Acronym	English equivalent
BD	Benchmark Definition of Foreign Direct Investment
BOP	Balance of Payments
BOPCOM	Committee on Balance of Payments Statistics
BPM5	Balance of Payments Manual Fifth Edition
BPM6	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	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.[2] 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 non-financial assets on the one hand and the net financial position on the other hand, the latter being the difference between financial claims on and liabilities to the rest of the world. The net financial position is included in the international investment position. The *balance of payments statistics* and the related *international investment position* 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 ***resident***, in conformity with other macroeconomic statistics, is defined in the balance of payments statistics using the concepts of *centre of economic interest* and *economic territory*. A resident of a given country is any natural or legal person or unincorporated entity whose centre of economic interest (permanent residence, registered office, permanent establishment, production etc.) is related to the economic territory of that country[3]. Therefore, in statistical terms the resident status of an economic unit in a given country depends on the **existence of the centre of economic interest** rather than on citizenship or nationality. From the perspective of a company, 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.

The accounting framework of the balance of payments statistics, similarly to business accounting, is based on a series of conventions. One of the most important conventions is the ***principle of double-entry bookkeeping***.[4] Each recorded transaction is represented by two entries: the business event itself and the related financing, as a debit or credit entry,

[2] This does not necessarily mean that it is the parties to the transaction that must be resident or non-resident. For instance, in the case of market instruments, a transaction between two residents involving a financial instrument representing non-residents' liabilities may also change the net external position of domestic institutional sectors vis-à-vis the rest of the world, while it does not affect that of the whole economy. Similarly, a transaction between two non-residents involving a financial instrument representing the liabilities of domestic sectors may have an effect on the breakdown of liabilities by country.
The BPM6 changed this rule so that irrespective of the aforementioned characteristics of a transaction, if the sale of a foreign instrument is concluded between residents belonging to different institutional sectors, it must be recorded as other change in stock rather than as a transaction in the balance of payments.

[3] The territories of diplomatic or government commercial, cultural etc. representations abroad and similar representations of other countries in a given country constitute the difference between the above-defined economic territory and the administrative territory.

[4] In his work *The Nature of Capital and Income,* Irving Fisher proposed the application of the principle of double-entry bookkeeping in macroeconomic accounting in 1906. Eventually, this idea turned into universal practice in economic statistics, including balance of payments statistics, after World War II, when the system of national accounts (SNA) was elaborated.

are recorded in the statistics with opposite arithmetic signs (See Chart 1).[5] In the overwhelming majority of transactions recorded in the balance of payments, non-financial or financial assets of a certain value *change ownership* in exchange for non-financial 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 consideration 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.[6] If the unrequited transfer affects accumulation, it constitutes a capital transfer[7]; otherwise it is a current transfer.

In accordance with the **convention on signs**, in the balance of payments, all credit entries are shown with a '+' sign and all debit entries with a '–' sign as income or expenditure, respectively. The sign shows if the transaction to be recorded constitutes a source of funding or if it creates a financing requirement.[8] Theoretically, it can be established how each transaction contributed to the change in a given national economy's claims on and liabilities to the rest of the world.[9]

Chart 1
The convention of double entry system in the balance of payments

Credit (+)	Debit (–)
export of goods and services	import of goods and services
inflow of income	outflow of income
received unrequited transfers	provided unrequited transfers
decrease in assets	increase in assets
increase in liabilities	decrease in liabilities

Following from the principle of double-entry bookkeeping, on the level of the balance of payments as a whole, the sum of all credit entries (revenues total) is identical to the sum of all debit entries (expenditures total), i.e. balance of payments statistics, by definition, have a zero balance. Putting it another way, theoretically, the sum of the balances of the current account, the capital account and the financial account is always zero.[10]

Clearly, in practice compliance with the above principle 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

[5] Credit (revenue) entries are recorded on the left side of the balance of payments, debit (expenditure) entries on the right side. In the financial account of the balance of payments, increases in assets and decreases in liabilities constitute debit entries, while decreases in assets and increases in liabilities are credit entries.
According to the convention regarding transactions, outflows of real resources (exports of goods and services), inflows of income and unrequited transfers received are recorded on the credit side, while inflows of real resources, outflows of income and unrequited transfers granted are recorded on the debit side in the current account or capital account of the balance of payments.

[6] In the context of the balance of payments, each "underlying transaction", which may be non-financial (e.g., export of goods) or financial (e.g., bond issue) in nature, has a related "financing" transaction, mostly the change of a financial position, but it may also be a non-financial (e.g. in case of a barter deal) or "notional" (e.g., for transfers) transaction not affecting the financial position, essentially offsetting the underlying transaction.

[7] Capital transfers include, for instance, the transfer of ownership of fixed assets free of charge or forgiveness of a whole or part of a financial liability or receivable as a result of an agreement between creditor and debtor.

[8] As a matter of interest, the sign convention used in balance of payments statistics is the reverse of that used in accounting. In accounting, a negative sign is given to revenue (credit) entries and a positive sign to expenditure (debit) entries. However, the credit/debit convention is the same in both statistics and accounting, and presents developments in assets and liabilities of the rest of the world vis-à-vis the compiling country. If the liabilities of the compiling country increase, the assets of the rest of the world also increase, i.e. the rest of the world provides 'credit' to the compiling country. Conversely, if the assets of the compiling country increase, the liabilities of the rest of the world also increase, i.e. the rest of the world increases his debts (records a 'debit') towards the country.

[9] Under BPM6, the presentation of the two sides of the financial account changes in the aggregate-level standard presentation. 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. For more detail, see Section 1.5.3 on key changes.

[10] For the application of the convention on signs, see the example in Annex.

would be assured for each transaction. In practice, however, statistics are compiled from different sources of data (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, 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.[11] 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.

Additional conventions applied in the compilation of statistics related to the rest of the world pertain to the ***uniform valuation*** **of transactions** and the ***uniform interpretation of the time of their recording*** in the statistics. The balance of payments 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 when the *ownership* of the non-financial 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 non-financial and financial assets, between residents and non-residents **as the main criterion for the inclusion of 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****, rather than cash,* ***basis***. The recording of a transaction and its timing is determined by the date of change of ownership (or in case of services the date of making use) rather than the time of payment of the countervalue.[12]

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 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.

In Sections 1.2 and 1.3 we present the structure and components of the BOP and IIP statistics. Breakdowns are consistent with the requirements of BPM5, the effective international methodology. When explaining the contents of the various instruments, we use footnotes to comment on the relevant changes implemented in the new BPM6 methodology adopted in 2008 and to be applied from 2014 on. After the description of its general structure, the development of international methodology and the process of the review is discussed in Chapter 1.5, where Section 1.5.1 summarises major past changes, Section 1.5.2 presents the novelties introduced in BPM6, while the subsequent section describes the main differences between BPM5 and BPM6. Section 1.5.4 discusses the implementation of the new BPM6 methodology, while the closing part of section 1.5.5 gives an outlook on the revision of the methodology applicable to direct investment.

[11] The absolute value of the balance of net errors and omissions itself is not sufficient for the assessment of the quality of the statistics concerned; its low value does not automatically mean that the statistics are accurate and reliable as errors with opposite signs may offset each other in the balance. On the other hand, a large and persistently unidirectional statistical error prevents users from relying on the statistics to obtain a true and fair picture of the changes in the country's net international position and its drivers.

[12] Otherwise, if the recording of transactions in the balance of payments were linked to the event of payment, a number of transactions would simply be omitted from the statistics. Unrequited transfers of goods, services and financial assets and transactions involving no payment (barter deals, direct investments with in-kind contributions or reinvested earnings, which are also related to direct investment) would not be recorded. Furthermore, transactions would not be recorded at the time when they actually affect the behaviour and decisions of economic units.

1.2 BALANCE OF PAYMENTS

Chart 2
Structure of the balance of payments[13]

Structure of the balance of payments	Credit	Debit	Net
1. Current account			
1.1. Goods			
1.2. Services			
1.3. Income			
1.4. Current transfers			
2. Capital and financial account			
2.1. Capital account			
2.1.1. Capital transfers			
2.1.2. Acquisition/disposal of non-produced, non-financial assets			
2.2. Financial account			
2.2.1. Direct investment			
2.2.2. Portfolio investment			
2.2.3. Financial derivatives			
2.2.3. Other investment			
2.2.4. Reserve assets			

In the balance of payments, the first important subaccount is the *current account*. It records real economic transactions (those related to trade in goods and services), investment income (income on equity and interest), compensation of employees and current transfers (workers' remittances, pensions and other annuities etc.).

The transactions recorded in the current account affect the country's *disposable income*.[14] The balance of *real economic transactions* (trade in goods and services) shows how external trade contributed to the *domestic value added* in a given period of time. The income balance reveals how income flows vis-à-vis the rest of the world, i.e. interest and dividend from investments, reinvested earnings and income received and paid for seasonal work performed abroad, contribute to *national income*. Finally, the balance of current transfers related to non-residents affects *disposable income*.

1.2.1 The current account

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

  In the goods trade there are some exceptions to the time of the *change of ownership* being the applicable recording criterion in the balance of payments. One such exemption is *goods for processing*, where the product (oil, textile etc.) is handed over for processing, then it is returned to its original owner. The entity that performs the processing contributes to the increase in value of the product only by the value added; still, goods for processing must be recorded under goods *at gross value*: the value of the product received (delivered) for processing in imports (exports), then the price of the goods returned (taken back) after processing increased by the value added in exports (imports). Another exception is *repairs on goods*, which must be recorded at net value under goods.[15] In case of *financial leasing*, there is no transfer of ownership in a legal sense until the end of the lease term. Nevertheless, in line with the economic substance of the

[13] In BPM6, the name of the *Income and Current transfers* subaccounts of the current account have been changed to *Primary income* and *Secondary income*. Together with the name, the content of the various categories has also changed slightly. For more detail, see Section 1.5.3 on key changes.
[14] The relationship between the balance of payments and the system of national accounts is summarised in Section 1.4.
[15] In the BPM6 both goods for processing and repairs on goods are moved to services. For more detail, see Section 1.5.3 on key changes.

Chart 3
Standard components of the current account

Standard components of the current account	Credit	Debit	Net
I. Current account (1+2+3+4)			
1. Goods			
1.1. General merchandise			
1.2. Goods for processing			
1.3. Repairs on goods			
1.4. Goods procured in ports by carriers			
1.5. Nonmonetary gold			
2. Services			
2.1. Transportation			
2.2. Travel			
2.3. Communications services			
2.4. Construction services			
2.5. Insurance services			
2.6. Financial services			
2.7. Computer and information services			
2.8. Royalties and license fees			
2.9. Other business services			
2.10. Personal, cultural, and recreational services			
2.11. Government services			
3. Income			
3.1. Compensation of employees			
3.2. Investment income			
3.2.1. Direct investment income			
3.2.1.1. Income on equity			
3.2.1.1.1. Dividends and distributed branch profits			
3.2.1.1.2. Reinvested earnings and undistributed branch profits			
3.2.1.2. Income on debt (interest)			
3.2.2. Portfolio investment income			
3.2.2.1. Income on equity (dividends)			
3.2.2.2.Income on debt (interest)			
3.2.2.2.1. Bonds and notes			
3.2.2.2.2. Money market instruments			
3.2.3. Other investment income			
4. Current transfers			
4.1. General government			
4.2. Other sectors			

transaction, when the leased goods are taken over, the transaction is recorded under goods, and against this a financial liability is entered in the financial account.

In balance of payments statistics, goods trade in both directions is recorded at *market value*, on f.o.b. terms, exporting country's frontier delivery terms. Those elements of the invoice value that include transport, insurance or other costs following from the delivery terms in the contract must be reclassified under the relevant entry of the current account.

- The classification of **services** is generally linked to the underlying activity, while in case of travel, government services and construction services it relates to the user of the service. The breakdown of services has become more detailed to reflect their increased importance.

- ***Income*** includes expenditure and income arising as a countervalue of using factors of production.

  Compensation of employees comprises those amounts received or paid as wages that are 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 even, necessarily, permanent residence; instead, the key factor is the location where the person pursues the activity through which as the 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.[16]

  Accordingly, in the balance of payments only *persons employed for less than a year may receive* compensation of employees; the most common example is consideration for seasonal work. In contrast, wages paid to *guest workers* working abroad for an extended period of time do not constitute a balance of payments item. This is because due to their habitual and long-term residence, in statistical terms guest workers become residents in the host country, thus their income received therein is a transaction between two residents and as such, it is not a balance of payments item. However, if a guest worker transfers a part of his wage earned abroad to his family in his home country, this is a balance of payments transaction as it is a transfer between a non-resident (the guest worker) and a resident (the family at home). In character, this is a current transfer, which is recorded under workers' remittances rather than income.

  Income from financial investment[17] is recorded in the current account differentiated by form of investment. Balance of payments statistics classify investments in a functional breakdown based on the motivation of the investor and the form of the investment.[18] On this basis, there are *direct investments*, *portfolio investments*, *financial derivatives*, *other investment* and the liquid external assets of the monetary authority on non-residents, i.e. international *reserve assets*. Accordingly, the current account contains income related to these forms of investment.

  That is, the first in line is **income from direct investment**, which is broken down to distributed income (dividend) and undistributed, reinvested earnings as well as interest income relating to debt instruments.

  Dividends must be recorded when the owners decide on their amount, that is, when they are declared.[19] In contrast, equity income accruing to the investor (after-tax profit, profit or loss) 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. In contrast, as a result of the method of recording, the owners' decision on the

[16] Students studying abroad and patients undergoing medical treatment for any length of time are exceptions from the rule of sufficient length of stay as they remain resident in the country where they arrived from, irrespective of the time spent abroad. Consequently, their consumption must be recorded under travel in the current account.

[17] Receipts and expenditures related to non-financial movable and immovable assets are recorded either under goods (financial lease) or services (operational lease, rent) or in the relevant line of the capital account (acquisition and disposal of non-produced non-financial assets) rather than under income.

[18] For more details on functional categories, see the chapter on the financial account.

[19] According to the BPM6, dividends paid from reserves (extraordinary dividend/superdividend) must be treated in the financial account as a withdrawal of equity rather than as dividend. The exceptional nature of extraordinary dividends is shown by their level being greatly in excess of previous dividends and of trends in earnings. The excess above the regular level of earnings must be shown as a withdrawal of equity.

dividend[20] and the actual disbursement is neutral in terms of its effect on current account balance, that is, it has no impact on the national economy saving-investment relationship.

In case of **income from portfolio investments**, dividend income on shares is recorded but reinvested earnings are not.[21] (For reinvested earnings to arise, the 10% non-resident ownership test must be satisfied, which would put the investment in the category of direct investment.) Debt instruments (bonds, money market instruments) generate interest income.

Other investment income is interest income.[22]

According to the methodology, no income is earned on **financial derivatives**; all the transactions relating to the contracts are to be recorded in the financial account.

As the balance of payments statistics are accrual-based, income must also be recorded on an *accrual basis* rather than on a *cash (settlement) basis*. As a consequence, investment income is recorded as *accruing on a continuous basis* during the term of the investment rather than when a payment is actually made. In the case of interest this means that accrued interest relating to the various periods are recorded under the various instruments. Until the interest or dividend is actually paid, the same amount of increase in assets or liabilities relating to the investment instrument must be shown in the financial account as the recorded income or expenditure.[23]

- **Transfers:** In most transactions recorded in the balance of payments, a certain value (goods, services, financial or non-financial assets) is exchanged for goods, services, financial or non-financial assets of identical value. In these cases it is easy to register both sides of the exchange in the statistics in accordance with the principle of the double-entry system since the instruments that change ownership are known. In some instances, however, no exchange occurs in a transaction because the transfer of a certain asset occurs without any compensation. Business events of this type are recorded under *transfers* in the balance of payments. A transfer is classified as current if the underlying economic value is a good (e.g., food aid) or service (e.g., consultancy free of charge), i.e., it belongs in the current account, while if it is a financial asset (e.g., debt forgiveness), it is considered a capital transfer. All unrequited transfers that directly affect *disposable income* must be classified under current transfers. Current transfers reduce the disposable income and consumption possibilities of the *donor* country and increase the disposable income and consumption possibilities of the *recipient* country.

1.2.2 Capital and financial account

The *capital and financial account* contains the **transactions vis-à-vis the rest of the world that are relevant for accumulation.** Its two subaccounts are the *capital account* and the *financial account*.

Based on the structure harmonised with the system of national accounts, the **capital account** contains capital transfers as well as revenues and expenditures related to the change of ownership of non-produced, non-financial assets.

Chart 4
Capital account

	Credit	Debit	Net
Standard components of the capital account			
II. Capital account (5+6)			
5. Capital transfers			
6. Acquisition/disposal of non-produced, non-financial assets			

[20] Disregarding the effect of dividend taxes.

[21] According to the BPM6, income from investment fund shares must be separated into dividends and reinvested earnings.

[22] The BPM6 discusses income relating to international reserves separately.

[23] If, for example, as yet unpaid interest income on bond investments is recorded in the current account, an increase in assets of identical value must be recorded under portfolio investments, bonds and notes in the financial account. When interest is actually paid, only the last part of the interest (accruing for the reporting period) has to be recorded under income in the current account, while the counterpart entry in the financial account to the cash receipt is a reduction in the bond claim increase registered in previous periods.

A **capital transfer** is an unrequited transfer provided either in cash or in kind. When in cash, it is considered a capital transfer if the money given without compensation relates to a fixed asset (e.g. an investment grant) or financial asset. Capital transfers can also be provided without any cash movement, e.g. by transferring the ownership of fixed assets or by debt forgiveness.[24] As opposed to current transfers, where disposable income changes as a result of the unrequited transfer, **capital transfers change the stock of *real or financial assets (wealth)* of the parties to the transaction**.

The changes in financial assets and liabilities related to *migration* between countries, i.e. *migrants' transfers* must also be included among capital transfers.[25]

Expenditure and income resulting from the *acquisition* or *disposal of* **non-produced, non-financial assets** (e.g. patent, copyright, etc.) must also be recorded in the capital account. The location of the item has been changed repeatedly by methodological revisions over the decades.[26]

The sale and purchase of *land and real estate* must be recorded in the capital account only if it is acquired by a foreign state or international organisation for purposes related to its own operation.[27]

The **financial account** shows the financial assets and liabilities that, as a result of transactions, are responsible for changes in the aggregate balance of the current account and capital account, i.e., the *net external financing capacity*[28]. Following from the balance of payments identity, the value of this balance is identical with the balance of the financial account, with opposite signs.[29] For example, if the balance of the current and capital accounts shows a deficit, the financial account must show a surplus of the same magnitude in direct-, portfolio- or other investments, or as a decrease in reserves. (This identity can be used to generate the external financing capacity from above and from below, and the difference of the two indicators yields the NEO, net errors and omission.) The restructuring of the financial portfolio (e.g. transit between sight and time deposits) and the interrelated changes in assets and liabilities (e.g. increase in assets on a current account due to borrowing) are also reflected in the composition of the financial account. However, transactions that affect only the financial account do not change its balance and thus the country's net external position, i.e. the value of assets less liabilities.

In the financial account, the classification of investments is based primarily on the motivation of investors and the form of investment. Accordingly, the financial account differentiates between the following functional categories: *direct investments*, *portfolio investments*, *financial derivatives*[30], *other investments* and the liquid external assets of the monetary authority on non-residents, i.e. international *reserve assets*. Each category can be broken down to more detailed levels based on assets and liabilities, by resident sector, taking account of the original maturity, and in case of direct investment, also based on the direction of investment.

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[24] *Debt forgiveness,* as opposed to *debt write-off,* is defined as the cancellation of all or part of the outstanding liabilities without compensation under a voluntary and mutual contractual arrangement between debtor and creditor. In this case, when the transaction is recorded, the counterpart entry to the transfer is the forgiven portion: the party that forgives the debt is the provider of the transfer.

[25] Under the BPM6, financial effects of the change of resident status will have to be recorded as changes in other stock rather than as transactions.

[26] The methodology before 1993 distinguished property income (originating from non-produced, non-financial assets, such as patents, licenses, copyright, etc.) as a separate category. The BPM5 terminated this individual item and the part of expenditure and income previously classified as ownership income that originates from renting out property is now recorded under services (royalty, license fee etc.), separated from income and expenditure from disposal, which have been moved to the capital account.
The BPM6 clarified the borderline between intellectual property and produced and non-produced non-financial assets.

[27] In this case, in statistical terms, the territory concerned ceases to be part of the economic territory of the country within the administrative borders of which it is located and it becomes the economic territory of the acquiring country. Thus the resident status of the territory changes for statistical purposes. However, apart from such instances, the resident status of land and real estate cannot change as a result of a sales transaction. As these assets are fixed to their location, they can produce benefits for their owners only at that location, economic interest can be held in them only there; consequently, they are resident where they are physically located. As a result, when a non-resident acquires ownership of a real estate or a piece of land, the related transaction is recorded in the balance of payments statistics as if the non-resident owner acquired a financial claim vis-à-vis a notional resident company. As a result, this transaction must be recorded as financial investment under direct investment in the financial account, rather than in the capital account as a transaction affecting non-produced, non-financial assets.

[28] Its value is positive if the aggregate current and capital account balance shows a surplus while it is negative if the balance shows a deficit. For this balancing item, the BPM6 adopts the term used in the system of national accounts: *net borrowing/net lending.*

[29] The net lending or borrowing (from current and capital account) is the sum of the balances of the current and capital accounts. Its value is positive if the aggregate current and capital account balance shows a surplus while it is negative if the balance shows a deficit. The net lending or borrowing is equal to the balance of the financial account with the sign reversed. For this balancing item, the BPM6 adopts the term used in the system of national accounts: *net borrowing or net lending.*

[30] In the BPM6, the term *employee stock options* is added to the name of this functional category, thus it will be labelled *Financial derivatives and employee stock options* in the standard presentation.

Chart 5
Standards of the financial account

Standard components of the financial account	Credit	Debit	Net
III. Financial account (7+8+9+10+11)			
7. Direct investment			
7.1. Abroad			
7.1.1. Equity capital			
7.1.2. Reinvested earnings			
7.1.3. Other capital			
7.1.3.1. Claims on affiliated enterprises			
7.1.3.2. Liabilities to affiliated enterprises			
7.2. In reporting economy			
7.2.1. Equity capital			
7.2.2. Reinvested earnings			
7.2.3. Other capital			
7.2.3.1. Claims on affiliated enterprises			
7.2.3.2. Liabilities to affiliated enterprises			
8. Portfolio investment			
8.1. Assets			
8.1.1. Equity securities			
8.1.2. Debt securities			
8.1.2.1. Bonds and notes			
8.1.2.2. Money market instruments			
8.2. Liabilities			
8.2.1. Equity securities			
8.2.2. Debt securities			
8.2.2.1. Bonds and notes			
8.2.2.2. Money market instruments			
9. Financial derivatives			
9.1. Assets			
9.2. Liabilities			
10. Other investment			
10.1. Assets			
10.1.1. Trade credits			
10.1.2. Loans			
10.1.3. Currency and deposits			
10.1.4. Other assets			
10.2. Liabilities			
10.2.1. Trade credits			
10.2.2. Loans			
10.2.3. Currency and deposits			
10.2.4. Other assets			
11. Reserve assets			
11.1. Monetary gold			
11.2. Special drawing rights			
11.3. Reserve position in the Fund			
11.4. Foreign exchange			
11.4.1. Currency and deposits			
11.4.2. Securities			
11.4.3. Financial derivatives			
11.5. Other claims			

Foreign direct investment[31] includes those foreign investments where an investor resident in one country aims to obtain long term holdings in a company resident in another country. The size and form of foreign direct investment is not driven primarily by short term yield expectation but by longer-term strategic plans and ownership considerations, which often optimise investment and financing decisions on the level of the entire multinational group of companies. Long-term interest 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. Based on the recommendation of the methodology, as a rule of thumb, **investments resulting in an at least 10 per cent share of foreign ownership must be recorded in this category**.[32] If this is the case, then in addition to the equity transaction between the investor and the investment enterprise, lending and other financing relationships are also shown in this line of the balance of payments statistics. Capital flows related to debt instruments not necessarily representing long-term funding for the enterprise must also be recorded as foreign direct investment. Examples include short-term funds (cash-pooling[33], zero balancing) moved as part of daily intragroup financial settlements. The common element of these monetary movements, which justifies their classification in the same statistical category, is the fact that the parties to the transaction are not independent of each other; instead, they are in a long-term indirect or direct ownership relationship. In other words, the long-term element is the investor relationship between economic entities; as a result, financial and capital relations between the parties may not be conducted on an arm's length basis. Within that relationship, loans between the affiliates (formerly generally known as intercompany lending), assets and liabilities due to the settlement of dividend payment, assets and liabilities of the cash pool and intercompany account, intragroup trade credits, debt securities as well as other assets and liabilities are to be recorded in the "other equity" category excluding shares. In other words, the key requirement for the recording of these items is a direct investment link between the parties.[34]

The primary consideration in the classification of direct investment is the *direction of investment*. In contrast with the primary asset and liability presentation customary for financial instruments, the balance of payments statistics, with a view to the requirements of users, shows resident investors' direct investments abroad and non-resident investors direct investments in the compiling country.[35] Within these categories, both equity and other capital flows follow the usual breakdown by assets and liabilities. Within other capital movements, the interpretation of assets and liabilities may cause no difficulties since both assets and liabilities may arise in the financing relationship between the parent company and the subsidiary. However, this also applies to the ownership of equity as in case of a reverse investment[36] below the 10 per cent threshold, the subsidiary's claim on the parent company appears in the statistics as an equity share in the direction reversing the original investment flow, as a liability of the parent company.

The category of **portfolio investments** includes financial instruments traded (tradable) on exchanges or other financial markets (excluding negotiable financial instruments recorded under direct investments and constituting reserve assets). Within portfolio investments, there are separate categories for *equity* instruments (in case of non-resident ownership below 10% – shares, other equity[37], investment units), *debt* securities (bonds and notes) and money market instruments. Portfolio investment is distinctive because of the largely anonymous relationship between the issuers and holders and the degree of trading liquidity in the instruments. In case of portfolio investments, breakdown by original maturity makes little

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[31] This investment category is also known as working capital.

[32] The BPM6, and similarly the fourth edition of the Benchmark Definition of FDI (BD4), the OECD's methodology manual on foreign direct investment, leaves the 10 percent threshold unchanged but instead of ownership (reference to the ownership of equity has been deleted from the definition), it applies it to *voting power*, a manifestation of ownership, which facilitates effective control or influence over the enterprise concerned. Thus, the definition facilitates the clear interpretation of the indirect working capital investment relationship, which involves the ability to control or influence rather than any direct ownership of equity. (For instance, if an investor owns 100% of an enterprise, which in turn is the 100% owner of another enterprise, then the investor, even though not having immediate ownership of the latter, can practically control it through the other, directly owned enterprise which is second in the chain of ownership.)

[33] One member of the direct investment relationship pools the accounts of the other group members in a pool header account, which facilitates the flexible fine-tuning of the group's balances of the accounts.

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

[35] In the standard presentation of BPM6, direct investment must also be reported in the primary breakdown by assets and liabilities.

[36] If the economic entity in which the original investment was made acquires equity in the investor, reverse investment results. If such reverse investment also reaches or exceeds the 10 per cent threshold, it is presented in the statistics as a separate direct investment, in the line appropriate for the direction of the investment. Under the BPM6, the concept of reverse investment also covers other capital instruments.

[37] Under the BPM6, other equity is moved to other investments.

sense as that factor may hardly have any significant effect on the behaviour of the investor (as a bond maturing in several years can be bought and sold on a daily basis if there is a liquid market).[38]

Financial derivatives[39] are classified into two main categories: *forward type* derivatives including swaps and *option type* derivatives. In a forward-type contract two counterparties agree to exchange a specified quantity of an underlying item (real or financial) at an agreed-on contract price on a specified date, while in certain swap contracts the counterparties agree to exchange, in accordance with prearranged terms, cash flows based on the reference prices (interest rate or exchange rate). At is inception, a forward type contract has zero value. This category includes interest rate swaps, forward rate agreements (FRA) and various forward foreign exchange contracts. 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). As a significant difference between forward and option type derivatives, in the former either party can be creditor or debtor depending on changes in the price of the underlying item, while in case of an option, the writer remains the debtor and the buyer remains the creditor throughout the life of the contract.

Assets not qualifying as direct investment, portfolio investment, derivative transactions or reserve assets are recorded among **other investment**. This category includes, among others, trade credits, interbank loans, syndicated loans, currency and deposits etc. that are neither direct investments nor international reserve assets. In the financial account this is the only group where assets and liabilities are broken down by *original maturity* – short-term (one year or less) or long-term (more than one year or no stated maturity).

The last component of the financial account is international *reserve assets,* one of the most important elements in the balance of payments and a key aggregate in the analysis of the external position. Under the balance of payments methodology, international reserve assets are liquid external assets on non-residents *controlled by and readily available to monetary authorities:* in the event of payment difficulties they can be used directly to perform payment, indirectly to ease financial pressure by intervention in exchange markets to affect the currency exchange rate or for any other purposes.[40]

1.3 INTERNATIONAL INVESTMENT POSITION

The *flow-oriented* balance of payments statistics are closely related to the *stock-oriented* statistics on the international investment position. In combination, 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.

The international investment position is a statistical statement that 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 the drivers of changes since the previous period.

[38] The BPM6 classifies debt securities by their original maturity.

[39] Since the amendment of 2000, financial derivatives have constituted a separate category in the balance of payments statistics. When the BPM5 was introduced, derivatives were included in the category of portfolio investments as a sub-group.

[40] The financial crisis in Mexico and in Asia in the 1990s highlighted the fact that the definition of international reserve assets in the balance of payments statistics did not necessarily express the actual intervention potential monetary authorities had in the event of a financial crisis. In order to assess the actual liquidity position, additional information was needed, for instance on the value of derivative and forward positions, the stock of guarantees undertaken and other contingent liabilities (most of which are off-balance-sheet under the applicable accounting principles) Furthermore, information on the stock of short-term debt to the rest of the world by remaining maturity rather than by original maturity, on debt denominated in the national currency but tied to another currency etc. would have been required but could not be obtained from the standard balance of payments statistics. In 1996, after the Mexican crisis, the IMF elaborated a *Special Data Dissemination Standard* – SDDS in order to provide investors and the general public with reliable and up-to-date information on the most essential economic and financial statistics (GDP, consumer and producer price indices, monetary aggregates, balance of payments, international reserve assets etc., totalling 18 categories by now) of the economies active in the capital and money markets. Within the SDDS, separate reporting was introduced on international reserve assets and external debt. Based on the information collected and published on the statistical methodology and national practice of the various countries, anyone may assess the reliability of the published statistics. For further details of the SDDS, see http://dsbb.imf.org/Applications/web/sddshome/.
In the BPM6 reserve related liabilities must be disclosed as a memo item and the breakdown of certain positions by remaining maturity must be provided as supplementary information.

The difference between the two sides of the balance sheet, i.e. assets and liabilities, is an economy's net external position (*net assets or liabilities*), which equals the country's *net worth* originating in financial investments vis-à-vis the rest of the world. Calculated on the asset and liability side 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[41], *gross external debt* comprises those debts of a country's residents to another country's residents that involve a repayment obligation (with or without the payment of interest) or, conversely, a interest payment obligation (with or without principal payment). Based on this definition, direct investments in the form of equity (share, equity capital, reinvested earnings etc.) do not qualify as debt. Similarly, *portfolio investments in equity securities* also represent non-debt financing. That is because equity participation entails no repayment or interest payment obligation. Based on the definition, financial derivatives are not considered debt 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 related to various types of equity and transactions with financial derivatives do not add to the country's net external debt, therefore they are referred to as *non-debt creating financing*.[42]

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 stock* (e.g., write-offs).

The structure of the international investment position by financial instrument is identical with the structure of the balance of payments financial account and it corresponds to the investment income categories of the current account.[43] This serves the reconciliation of flow and stock data and the consistent accounting for earnings related to the various investment categories.

In the IIP, signs correspond to the effect on the stock: entries increasing the value of the stock are recorded with a "+" sign, entries decreasing the value of the stock, with a "–" sign, irrespective of the stock being assets or liabilities.

As positions have to be valued at market prices and exchange rates effective on the reference dates and then converted into the currency of compilation, the stock values calculated for the two different dates will differ on account of valuation changes even if no transactions have been performed in between. The value of stocks, however, may vary for reasons other than transactions or revaluation, including debt write-offs.[44] The reclassification of certain items from one group to another to assure compliance with changed classification criteria also triggers other changes in stock. This occurs, for instance, when the 10 per cent threshold between direct investment and portfolio equity investments 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 is shown among direct investments in the financial account (although no retrospective adjustment is required in the financial account), whereas in the IIP, the amount recorded as portfolio investment in the preceding period must be reclassified as direct investment. Such reclassifications must be recorded among other changes in stock.

[41] External Debt Statistics: Guide for Compilers and Users, IMF 2003: http://www.imf.org/external/np/sta/ed/guide.htm (p.7) (External Debt Guide).

[42] Financial assets and financial liabilities in the statistical sense are significantly different from the corresponding accounting terms because in the accounting sense, direct investment instruments (direct investments on the asset side and own funds on the liability side) are not part of financial assets and financial liabilities. There is no contractual payment obligation attached to the ownership of such instruments, unlike in the case of loans or other debt instruments such as bonds.

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

[44] A write-off is the creditor's unilateral act and as such it should not be confused with debt forgiveness, which is based on a mutual arrangement between the debtor and the creditor as discussed in the section on capital transfers.

Chart 6
Standard components of the international investment position

Standard components of the international investment position

	Position at beginning of year	Changes in position reflecting				Position at end of year
		transactions	exchange rate changes	price changes	other adjusments	
1. Assets						
1.1. Direct investment*						
1.1.1. Abroad						
1.1.1.1. Equity capital and reinvested earnings						
1.1.1.2. Other capital						
1.1.1.2.1. Claims on affiliated enterprises						
1.1.1.2.2. Liabilities to affiliated enterprises						
1.2. Portfolio investment						
1.2.1. Equity securities						
1.2.2. Debt securities						
1.2.2.1. Bonds and notes						
1.2.2.2. Money market instruments						
1.3. Financial derivatives						
1.4. Other investment						
1.4.1. Trade credits						
1.4.2. Loans						
1.4.3. Currency and deposits						
1.4.4. Other assets						
1.5. Reserve assets						
1.5.1. Monetary gold						
1.5.2. Special drawing rights						
1.5.3. Reserve position in the Fund						
1.5.4. Foreign exchange						
1.5.4.1. Currency and deposits						
1.5.4.2. Securities						
1.5.4.3. Financial derivatives						
1.5.5. Other claims						
2. Liabilities						
2.1. Direct investment*						
2.1.1. In reporting economy						
2.1.1.1. Equity capital and reinvested earnings						
2.1.1.2. Other capital						
2.1.1.2.1. Claims on affiliated enterprises						
2.1.1.2.2. Liabilities to affiliated enterprises						
2.2. Portfolio investment						
2.2.1. Equity securities						
2.2.2. Debt securities						
2.2.2.1. Bonds and notes						
2.2.2.2. Money market instruments						
2.3. Financial derivatives						
2.4. Other investment						
2.4.1. Trade credits						
2.4.2. Loans						
2.4.3. Currency and deposits						
2.4.4. Other assets						

** Because direct investment is classified primarily on a directional basis, sub-items do not strictly conform to the overall headings of assets and liabilities.*

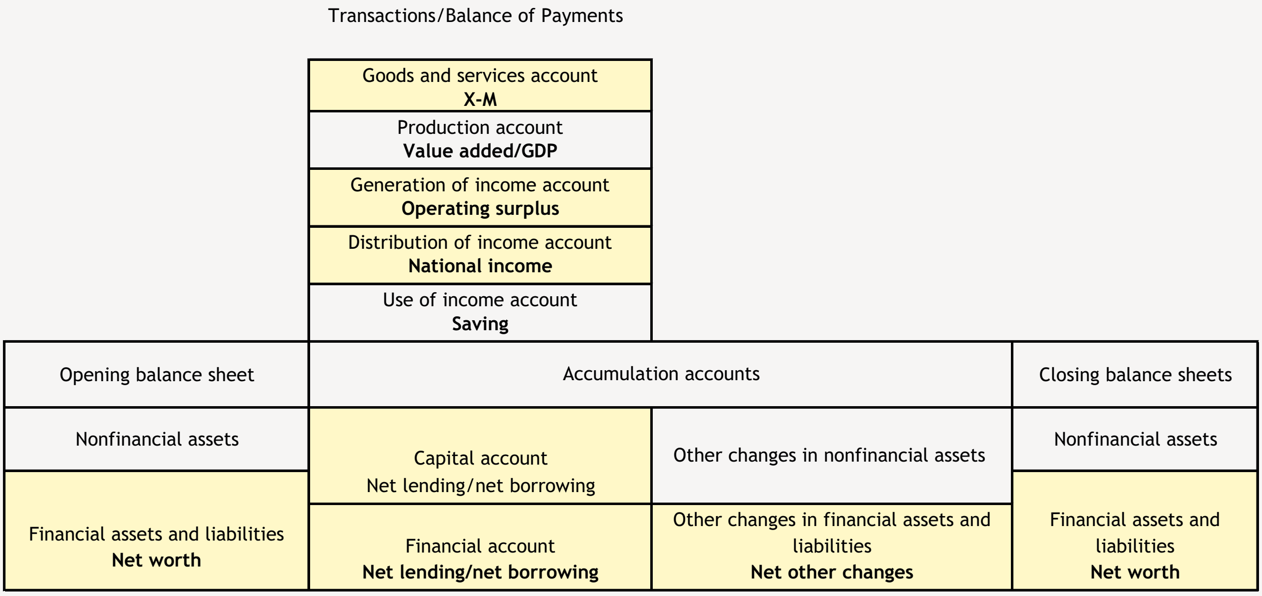
1.4 POSITION OF THE BALANCE OF PAYMENTS IN MACROECONOMIC STATISTICS, ITS LINKS TO THE SYSTEM OF NATIONAL ACCOUNTS

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) is the international set of standards that facilitates the comparison of the economic output of the member countries through the system of national accounts of the various countries. It is one of the most important contributions of the 20th century to the tool set of economic analysts.[45] 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: non-financial 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[46] of the total economy.

Chart 7
Overview of the key accounts and balancing items of the System of National Accounts as a framework for macroeconomic statistics including International Accounts



Key:
Name of account
SNA balancing item
Non-shaded accounts do not appear in the international accounts
***where** the components relating to the BOP and IIP are highlighted and the name of the balancing item is indicated in bold.*
***GDP** = gross domestic product*
***S** = saving*
***NL** = net lending*
***NWO** = opening level of net worth*
***NWC** = closing level of net worth*
dNW_1 *= change in net worth from revaluation*
dNW_2 *= change in net worth from other change in volume.*

[45] The first edition was published in 1953.

[46] As international statistical methodology manuals are originally published in English, we have included, in parentheses, the English equivalents of key terms to better understanding. (While national accounts, more particularly the manual of the European System of Accounts (ESA) have been translated into Hungarian, the balance of payments manual is not available in Hungarian.)

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.

Chart 7 presents the System of National Accounts. Accounts that have their counterparts in the BOP and IIP statistics are highlighted, the balancing items of the various accounts are indicated in bold.

Correlations between national account aggregates and the balance of payments

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

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

Correlations between national account aggregates and the balance of payments

GDP	**=**	**C + G + I + (X – M)**	**(1)**
GNI	**=**	**GDP + NY**	**(2)**
GNDI	**=**	**GDP + NY + NCT**	**(3a)**
		C + G + I + (X - M) + NY + NCT	**(3b)**
		C + G + I + CAB	**(3c)**
CAB	**=**	**(X – M) + NY + NCT**	**(4a)**
		GNDI – (C + G + I) = GNDI – A	**(4b)**
S	**=**	**GNDI – C – G**	**(5a)**
		I + CAB	**(5b)**
CAB	**=**	**S – I**	**(6a)**
		(SH – IH) + (SE – IE) + (SG – IG)	**(6b)**
S – I + NKT – NPNNA	**=**	**CAB + NKT – NPNNA = NFI**	**(7)**

Where
C = private consumption (household consumption expenditure)
CAB = current account balance
G = government consumption expenditure
GDP = gross domestic product
GNI = gross national income
A = domestic use
GNDI = gross national disposable income
I = gross domestic (non-financial) investment
M = imports of goods and services
NCT = net current transfers from abroad
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, non-financial assets
NY = net income from abroad
S = gross saving
X = exports of goods and services

(SH – IH) = net financial savings by households
(SH – IH) = net financial saving by corporations
(SG – IG) = net financial saving by government

The current account balance reflects the economy's savings position vis-à-vis the rest of the world (6a), in other words, whether the value of gross saving relative to gross investment results in borrowing (current account deficit) or lending (current account surplus).

Any amount of the disposable income not used within an economy is automatically recorded in the balance of payments as funds allocated abroad and any domestic use in excess of the disposable income is recorded as borrowing (4b). 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 (7). The relationship between the net financial positions of the individual sectors and the current account balance is shown in equation (6b).

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 theory. 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.[47]

1.5 REVISION OF THE BALANCE OF PAYMENTS METHODOLOGY (BPM5)

1.5.1 Background and process of the revision

Revision of the balance of payments manual (BMP) from a historic perspective

Ever since its foundation, the IMF has needed to assure, for its fundamental functions, that the balance of payments statistics compiled by the various countries contain comparable data relying on uniform methodologies. Since 1948, the subsequent editions of the Balance of Payments Manual (BMP) have served to present an international methodological framework adapted to the changing economic trends and user requirements.

Each new edition of the Manual was a response to economic and financial developments, changing user needs and the practical experiences of statisticians. **The first edition in 1948** consisted primarily of tables for reporting data to the IMF and brief instructions for completing them. Its sole purpose was to assure the fundamental conditions for meeting the regular and uniform international reporting requirements. The explanation of general concepts relating to balance of payments statistics was added only in the **second edition in 1950**. The **third edition issued in 1961** moved beyond the description of reporting requirements and the explanation of categories. It added the discussion of general balance of payments interrelations and principles that could be used by countries to serve their own needs. The **fourth edition was published in 1977** in response to the radical changes in the international financial system. Fuller treatment was given to underlying categories (such as the concept of residence) and to accounting principles (e.g., valuation); furthermore, through the use of standard components, different presentations were introduced to facilitate greater flexibility in the compilation of the balance of payments and its subaccounts.

The **fifth edition**, currently applied worldwide, **was published in 1993**. The development of this version ran parallel with the revision of the system of national accounts (this tradition was continued during the design of the most recent sixth edition). This also shows one of the central objectives of the revision: **harmonisation with other macroeconomic statistical frameworks, in particular the most important one, national accounts.** The fifth edition brought about a number of **fundamental changes** in definitions, terminology, categories and the **structure of the balance of payments**.

[47] Chapter 14 of the BPM6 gives a brief introduction to the analysis of balance of payments statistics.

For instance, up to 1993 the balance of payments consisted of two parts: the current account and the capital account. The current account used to consist of goods, services (including income) and all transfers.[48] The structure used to this day was introduced in the fifth edition or subsequently: income was separated in the current account and more categories of services were added. The capital account was renamed capital and financial account, and the capital transfers formerly shown in the current account were moved to the capital account and non-produced, non-financial assets were presented separately. In the financial account, direct investment, portfolio investment, other investment and reserve assets were separated at that time. The concept of portfolio investments was broadened to include short term securities and financial derivatives.[49] Financial derivatives became a separate functional category subsequently, in 2000.[50] The amendment in 2000 defined the general rules for the recording and classification of financial derivatives; accordingly, no income is earned on an instrument; all the transactions relating to the contracts are to be recorded in the financial account. 2002 brought yet another change in the recording of derivatives: the derivative transactions and positions between enterprises involved in direct investment are also disclosed in the line for financial derivatives (no derivatives are recorded within direct investments even if the contracts are entered into between economic entities in direct investment relationship).[51] As an additional novelty in the fifth edition, alongside the balance of payments recording transactions, the international investment position was given more emphasis in the methodology. Rather than treating the economy as a single unit, the manual introduced the microfoundations of units and institutional sectors, which also represented a harmonisation step with the system of national accounts.

To supplement the methodology-oriented BPM5, the IMF published additional volumes to respond to the needs of users (mostly statisticians working on the compilation of the balance of payments) discussing practical aspects of data collection and the compilation of statistics (Compilation Guide, 1995) or containing numerical examples to illustrate general principles and to facilitate their understanding (Textbook, 1996). From that point on, the review of the Manual has also included the updating of these supplementary publications.

Process of the methodological revision

In 2001, the IMF Committee on Balance of Payments Statistics[52] (BOPCOM) initiated the review of the 5th edition of the Manual issued in 1993. Naturally, in respect of the timing of the revision the ever-present conflict between statistical methodologies reflecting economic processes and the practice of countries applying such methodologies was unavoidable; in today's fast-changing world, this presents an ever growing challenge to all parties concerned.[53]

The issues addressed in the course of the revision:

- the first group consisted of *general, theoretical issues* (e.g. consistency of different macroeconomic statistics, extended division by sectors and instruments, the statistical interpretation of income, etc.),
- the second group included new or *recently encountered problems* (e.g. the relationship between external debt and the international investment position – breakdown according to remaining maturity, domestic and foreign currency –, the correlation between the balance of payments and monetary statistics, incorporation of the economic peculiarities of economic and currency unions in the statistical data, incorporation of changes in international accounting standards, the treatment of repurchase agreements etc.),
- the third group consisted of required *clarifications* of BPM5 (e.g. definition and statistical treatment of international reserve assets, theoretical and practical issues related to the treatment of direct investments etc.).

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[48] The balance of payments methodology before 1993 interpreted every unrequited transfer as a current account item irrespective of the economic asset in the transaction being goods (e.g. food aid), service (e.g. free consultancy) or some kind of financial asset (e.g. debt forgiveness).

[49] Under the BPM5 published in 1993, the "interest-labelled" cash flows relating to swaps and to various interest rate derivatives had to be shown as income in the current account.

[50] Year 2000 supplement: http://www.imf.org/external/pubs/ft/fd/2000/finder.pdf.

[51] Year 2002 supplement: http://www.imf.org/external/np/sta/fd/2002/fdclass.pdf.

[52] The IMF established the Committee on Balance of Payments Statistics (BOPCOM) in 1992 to liaise with member countries and international institutions on the subject of balance of payments statistics. When the revision was initiated, Antal Gyulavári, then head of the Statistics Department of the MNB was serving on the Committee.

[53] At that time a number of countries had barely implemented the BPM5, and others were still using earlier versions of the Manual to compile their statistics.

The revision of BPM5 ran parallel with the updating of the system of national accounts methodology (SNA1993) under the auspices of the UN and of the statistical methodology for direct investments (BD3) orchestrated by the OECD.[54] In addition to the reviews being simultaneous, there were also organisational and cooperation arrangements in the revisions of the various methodologies to promote the consistency and harmonisation of the various fields.

BOPCOM discussed the list of issues to be tackled, the overall structure of the new methodology manual and the time schedule for the methodological revision in 2002.[55] The deadline for the completion of the final version was set to be the end of 2008.[56] To assure compliance with that deadline, no new themes were allowed to be added to the Manual after October 2006. Any issues arising thereafter or remaining outstanding were placed on a research agenda to be utilised in subsequent editions. The revision was conducted with the involvement of the general public; every document was made available on the website of the IMF. First, an Annotated Outline of the proposed manual, complete with comments and questions, was released for public discussion early in 2004.[57]

In 2003 the Committee decided to set up three technical expert groups (TEG). Issues related to direct investment were assigned to the competence of the Direct Investment Technical Expert Group (DITEG), special topics on the currency unions to the Currency Union Technical Expert Group (CUTEG) and all other questions to the Balance of Payments Technical Expert Group (BOPTEG). BOPCOM decided to set up another team of experts to discuss issues related to international reserve assets. This was RESTEG (Reserve Assets Technical Expert Group).[58]

Between January and September 2008 the IMF organised regional seminars all around the world to raise awareness of the new manual and to collect comments. The final version took account of comments voiced in the various forums as well as the first volume of the national accounts, issued in the meantime, and in December 2008 it was published on the IMF homepage.[59]

Experience with the fifth edition indicated that changes not affecting the general framework may be required with increasing frequency if we are to incorporate into the statistical framework the economic developments of the fast-changing environment. BOPCOM laid down the procedures for the *ongoing revision* of the Manual between major versions indicated by numbers. Updates were divided into four types depending on their depth and character, with different consultation mechanisms designated to them

- The first group includes simple technical, *editorial amendments*. They do not effect substantive elements of the system (structure, concepts), therefore their implementation needs no special consultation: after contacting BOPCOM for its advice, the IMF will produce an errata sheet, which will be publicised on the IMF website.

- The second group consists of changes attributable to *clarifications beyond dispute*. Such a case arises, for instance, when a situation that was negligible when the manual was produced (and thus not addressed therein) has become considerably more important or when a new economic situation emerges for which the appropriate statistical treatment is straightforward under the existing framework. In this case, the procedure is also relatively simple: similarly to the previous scenario, the IMF will draft the clarification, and after advice from the BOPCOM, they will be publicized on the website.

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[54] Revision of the 3rd edition of the *OECD Benchmark Definition of FDI* (BD3), the methodological manual issued by the OECD concerning statistics on direct investments. http://www.oecd.org/dataoecd/10/16/2090148.pdf. The revision of BD3 is discussed in more detail in Section 1.5.5.

[55] See: *Updating BPM5: Compendium of Issues* http://www.imf.org/external/pubs/ft/bop/2002/02-25.pdf and *Updating BPM5: A Proposed Timetable and Structure* http://www.imf.org/external/pubs/ft/bop/2002/02-26.pdf.

[56] The meeting in the previous year had set the target completion date at 2007 but that proved to be impracticable as the detailed time schedule was compiled; furthermore, the 2008 target was in line with the proposed completion of the revision of the system of national accounts.

[57] One of the issues to be decides was the title of the new handbook. Eventually some 33 countries and several international institutions took the opportunity to express their views on the outline and the questions.

[58] Our colleague, Mihály Durucskó was also on the RESTEG team of experts. The issues reviewed, the materials prepared, the positions and proposals made by the expert groups are available on the IMF website:
DITEG: http://www.imf.org/external/np/sta/bop/diteg.htm;
CUTEG: http://www.imf.org/external/np/sta/bop/cuteg.htm;
BOPTEG: http://www.imf.org/external/np/sta/bop/bopteg.htm;
RESTEG: http://www.imf.org/external/np/sta/bop/resteg.htm.

[59] Documents and information related to the methodological review are available on the IMF website:
http://www.imf.org/external/np/sta/bop/bopman5.htm.

- The third group includes cases where the solution is open to dispute because *different interpretations* are possible. This situation occurs when a new situation arises for which several solutions may be applicable under the effective methodology. In this event, the consultation process will also involve external experts and, where the issue is also relevant to the national accounts, the ISWGNA[60]. The final version is elaborated in view of their comments, to be eventually published on the IMF website.

- The last, fourth group consists of *changes to the framework*. This happens when a new economic situation occurs in which it becomes apparent that the concepts and definitions of the effective methodology are not suitable to appropriately capture the new situation, therefore parts of the Manual need to rewritten. The procedure is similar to the one applicable to the third group of changes except the parties involved in the consultation include all IMF member countries. At the end of the process, BOPCOM decides whether the changes approved should be promulgated as separate amendments or a new edition of the Manual needs to be issued.

1.5.2 The new Manual (BPM6)

To further emphasize the importance of international investment position statistics, they are referred to in the title of the new Manual: *Balance of Payments and International Investment Position Manual Sixth Edition (BPM6).*[61] The message is clear: to assess external economic and financial developments and the related risks as well as sustainability, it is not 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. Naturally, the close relationship of positions and the various components of change affecting their value is reflected not only in the title but also in the body of the Manual.

In addition to the recognition of the increasing importance of balance sheet data, globalisation related issues have also had a prominent impact on the final content and structure of the Manual. In particular, new elements include issues relating to currency unions, cross-border production, international labour migration related issues as well as special multieconomy corporate structures.

The incorporation of international financial innovation into the statistical framework has also been given more emphasis. This encompasses the discussion of new financial instruments (e.g., derivatives, securitization, gold accounts) as well as of new institutional arrangements (e.g., special purpose entities and complex, multieconomy corporate structures).

The new edition has a high degree of continuity with the previous version; the framework set out in BPM5 has proved fundamentally appropriate to incorporate changes necessitated by recent developments. Thus the overall structure of the accounts and the broad definitions are largely unchanged in this edition. In this respect, BPM5 dad introduced considerably more radical changes to its predecessor.

The new Manual had to meet the following main expectations:

- to present and explain concepts, relationships, accounting principles and conventions relevant for balance of payments statistics;
- to enhance comparability of statistical data across countries through the promotion of a methodology adopted following extensive international consultation;
- to show the links of balance of payments statistics to other macroeconomic statistical frameworks and to promote consistency between their data sets; and
- to provide guidance on the uses of balance of payments statistics.

[60] InterSecretariat Working Group on National Accounts (ISWGNA), a body established by the Statistical Committee of the UN, which has provided a forum for cooperation on national accounts issues to the relevant international institutions (EU, IMF, OECD, World Bank) since the 1980's.

[61] In contrast, continuity is assured by the acronym, BPM6 , retained as the reference name. The title of this booklet contains the term international investment position for similar reasons.

The Manual is not a legal regulation; instead, it is the summary of international obligations the implementation of which is not compulsory in its entirety. The Manual sets out to provide a framework that is applicable for a range of economies at very different levels of development. As a result, certain elements, events, breakdowns etc. will be relevant for some countries but not for others. It is the responsibility of the statisticians of a country to translate the contents of the Manual to their day-do-day work and apply them in a way appropriate for their circumstances. This should not be a once-and-for-all decision as adaptation to the changing circumstances raises the need for adjustment from time to time.

As in accordance with the revision schedule, by the end of 2006 essentially all outstanding methodological issues had to be closed so that the new Manual can be published by end-2008, issues still outstanding were put on a research agenda. These topics set the possible directions for future methodological research. Following the clarification of problems, results can be utilised in future editions. The research agenda for BPM6 contains the following topics:

• definition of ultimate investing economy and ultimate host economy in direct investment,
• whether direct investment relationships can be achieved by means other than ownership of equity (e.g., through warrants or repos),
• treatment of pass-through funds,
• reverse transactions including short positions and investment income to be recorded while a security is on-lent,
• use of fair values to loans,
• how the risk and maturity structure of the assets and liabilities should be taken into account in the reference rate for calculations of FISIM,
• investment income, in particular reinvested earnings (different treatments for different instruments) and the borderline between dividends and withdrawal of equity,
• debt concessionality, in particular whether the transfer element between market and contractual conditions should be recognized and, if so, how it should be recorded,
• the treatment of emission permits.

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

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 emphasize the increased importance of the investment position since the publication of BPM5 in 1993.

Chapter 7: International Investment Position (IPP)
Chapter 8: Financial Account
Chapter 9: Other Changes in Financial Assets and Liabilities Account
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 subaccounts (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 Reorganization 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: Direct Investment (Topical Summary)
Appendix 6b: Financial Leases (Topical Summary)
Appendix 6c: Insurance, Pension Schemes, and Standardized Guarantees (Topical Summary)
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[62]

1.5.3 Major changes from BPM5[63]

The Manual has almost doubled in length due to the more detailed explanations and the higher number of appendices on special issues and topical summaries. And, even though the overall framework remained unchanged during the revision, significant changes did occur in certain areas. The most notable changes are as follows:

- Treatment of goods for processing and goods under merchanting. The change relates to the more consistent approach of recognizing transactions based on *change in economic ownership* rather than a simple *change in ownership*.[64] 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[65]). Repairs are also recorded as a service rather than goods.

- Changes in the measurement of financial services, including Financial Intermediation Services Indirectly Measured (FISIM), spreads on the purchase and sale of securities, and the treatment of insurance and pension services;

- Elaboration of a treatment of direct investment consistent with the OECD Benchmark Definition of Foreign Direct Investment (for more detail, see Section 1.5.5.), notably the recasting in terms of control and influence, treatment of chains of investment and fellow enterprises, and presentation on a gross asset and liability basis as well as according to the directional principle. The definition of the superdividend and its treatment as withdrawal of equity has been clarified.

- The introduction of the concepts of reserve-related liabilities, standardized guarantees and unallocated gold accounts. The concept of monetary gold has been clarified: gold bullion including allocated gold accounts as well as unallocated gold accounts.

[62] *Standard components* are items that are fundamental categories and contribute to the totals and balancing items. *Memorandum items* are part of the *standard presentation* but, unlike standard components, are not used in deriving totals and balancing items. Examples include loans at fair value as, unlike most financial instruments, they need to be recorded at nominal value in the IIP. Thus the latter is a standard component while data supplied by the creditor on loans at fair value are "only" memorandum items. Standard components and memorandum items together constitute the *standard items* of the framework.
In addition, the framework uses the concept of supplementary item, which is outside the standard presentation but reflects important information for users on the economy concerned. Such supplementary items include, for instance, the detailed breakdown of current transfers by code (taxes on income and wealth, social contributions, social benefits, etc.).
Obviously, every standard item (standard component+memorandum item) will be a relevant, or even independently existing and observed, category for a minority of the countries only. Nevertheless, the reporting to the IMF covers the whole range of such data, and each country must report them as completely and accurately as possible considering its particular circumstances.
[63] The changes are listed in detail in Appendix 8 of BPM6.
[64] In BPM5 the treatment of financial leases or repurchase agreements are examples for this.
[65] However, even under the gross approach, data are entered only on the export side. The value of the goods acquired is reported as negative exports.

- New concepts for the measurement of international remittances. The category of *personal transfer* is introduced as a standard component and *workers' remittances* as a supplementary item. Furthermore, a distinction is made between *personal remittances* and *institutional remittances*.[66]

- Increased focus on balance sheets and balance sheet vulnerabilities (including a chapter on flows other than those arising from balance of payments transactions). The breakdown of certain balance sheet data by currency structure and remaining maturity are included among supplementary information.

- Strengthened concordance with the SNA, such as the full harmonization of the scope and classification of financial instruments (e.g., the recognition of pension entitlements and employee stock options as financial instruments and the use of the same terminology. The names of subaccounts are identical in both statistical frameworks (e.g. primary and secondary income instead of investment income and current transfers) and so are the contents of balancing items (current external balance, net lending/net borrowing). In the context of the change, the relationship to certain BOP income categories (*primary income*, *property income* and *investment income*) is explained. As a result of this change, now taxes on and subsidies to goods and production are also recorded under primary income as opposed to BPM5, which treated them as current transfers.[67]

- In the context of harmonization, the change of the standard presentation (aggregate level) in the financial account. Instead of debits and credits (inflow/outflow), balances are recorded on the two sides of the accounts: the *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 above or from below, respectively.

- Treatment of Special Purpose Entities[68, 69]. Special purpose entities are recognized by the framework as independent institutional units in their country of incorporation. As during the revision no agreement was reached on the internationally applicable definition of SPEs, every country may use its own national definition to identify them and to disclose supplementary statistics on them accordingly.

- Clarification of the definition of residence. The definition of residence is expressed as *centre of predominant economic interest*, replacing the former *centre of economic interest*. This facilitates a less controversial classification of "multi-residence" households and enterprises.

- Transfers relating to migrants are no longer treated as transactions but as other changes is stock.

- SDR allocations become a debt instrument, thus the recipient country must record them as a liability. This allows for the recording of SDR allocation as a transaction.[70]

- Clarification of the settlement of intellectual property related transactions by the more detailed explanation of the various categories and the clarification of the borderline between produced and non-produced non-financial assets. "Products" of research and development (patents, trademarks, know-how) are now treated as produced assets, as opposed to their treatment under BPM5.

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[66] This topic is discussed in detail in Appendix 5 of BPM6.

[67] Thus the link between GDP and GNI can now be derived directly from the balance of payments as certain components of current transfers no longer need to be taken into account for the calculation. On the implementation of BPM6, transactions with the EU in the aforementioned categories will also be reported among primary income.

[68] Examples are financing subsidiaries, conduits, holding companies, shell companies, shelf companies and brass-plate companies.

[69] For details of the methodology, see Section 1.5.5. and, for the Hungarian implementation, Section 2.1.3.1.

[70] Hungary was allocated SDRs first in August 2009, for the total value of 991 million SDR. Under BPM5, these transactions contributed to an increase of reserve assets as other changes in stock.

• The concept of the local enterprise group, which, during the compilation of direct investment statistics and if economically justified, allows for the consolidation of a multinational group of enterprises to include its resident companies.

• Special rules are introduced for special non-resident units established or controlled by 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, whereas 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.

1.5.4 Implementation of the new methodology

Experience shows that after past revisions, the new methodology was implemented and the balance of payments statistics time series managed by the IMF converted in 1-2 years after the completion of the revision process.[71]

For the 2009 BOPCOM meeting a survey was prepared on the plans of countries concerning conversion. The responses of the participating countries revealed that many of them had already implemented changes in the compilation of their own statistics in accordance with the new methodology, but the full implementation of BPM6 had been completed by a single country, Australia, by 2009. The survey also provided an opportunity for countries to highlight issues considered particularly problematic for practical implementation. It also allowed the IMF to focus on these problems on its Compilation Guide, in the works at the time, and to adjust the timing of the completion of the various chapters accordingly.[72] Also relating to implementation, the IMF prepared a conversion matrix[73], which shows, item by item, the links between BPM5 and BPM6 complete with brief explanations. At the same time, a working group was set up with the mandate to put forth recommendation for the solution of outstanding issues relating to the conversion.[74] There was agreement within BOPCOM that the BPM5 framework should be effective before 2012 and statistics should be compiled after 2014 under the new methodology. **The IMF proposes conversion to BPM6 in its own databases from the year 2012 publication, which contains data on 2011.**

Considering that **increased harmonisation between the various macroeconomic statistics** was a priority during the revision, clearly this harmonization aspect must be given appropriate emphasis when decisions are made on implementation related questions. Moreover, regional constraints should not be disregarded in this issue on the global or country levels. For Hungary such a regional constraint is the system of statistical cooperation within the European Union. The target date approved by Member States for conversion is 2014, which means that Member States will have to supply data under the new methodology for the first time in 2014 concerning the reference year of 2013. That is because within the EU, the European System of Accounts (ESA 2010) revised in line with the system of national accounts will become effective in 2014, and accordingly, BPM6 will also be introduced at that time.[75] The MNB also plans full conversion to BPM6 accordingly. It is certain that from 2014 on only statistics compiled under the new methodology will be published; however, the joint responses and solutions of Member States are not decided yet on other issues relating to the transition backcasting of time series, compilation of parallel time series, issue of retrospective data revision, etc.).[76]

[71] Statistics by countries and the related country-specific methodological comments are included in the Balance of Payments Statistics Yearbook (BOPSY), dating back almost 60 years, and in the related database. The on-line database of the IMF is available from: http://www.imfstatistics.org/imf/ (BOP = balance of payments database).

[72] It is envisaged that as a chapter is completed, it will immediately be released on the internet rather than waiting for the entire volume to be ready. In addition to discussing the general data sources and data collection methods, the book will also dwell on certain problematic items.

[73] The conversion matrix is also available from the IMF website: http://www.imf.org/external/pubs/ft/bop/2007/pdf/matrix.pdf.

[74] The working group discussed issues such as, inter alia, whether the entire time series needs to be converted from BPM5 to BPM6 (some of the time series has been estimated already upon conversion to BPM5 – how would "double conversion" affect data quality?), whether after conversion the time series under BPM5 should continue to be generated, who should be responsible for the conversion of historic data: the member countries or the IMF, should there be parallel time series prepared under both frameworks, and if yes, how long and in what direction, and so forth. In addition to technical issues relating to the implementation of the new framework, there is the question of preparing users in advance for the change in methodology.

[75] Within the EU, legislation sets out the obligations of Member States concerning the compilation of macroeconomic statistics.

[76] The time lag of the conversion compared to the IMF will mean that the IMF will convert, as it did when previous revisions occurred, our data reported in accordance with BPM5, with the relevant comments, in its own databases in accordance with the new methodology and presentation. This will assure that the time series in the BOPSY database are comparable irrespective of the national practices of the various countries. (The BOPSY will contain the August–September 2009 SDR allocation in accordance with the new methodology.)

1.5.5 Outlook: revision of the methodology of direct investments based on the 4th edition of the OECD manual[77]

In this section we give a brief overview of the main changes of the OECD manual, revised in parallel with the BPM5, and the special methodological issues mostly relating to direct investments.

Direct investment statistics are part of the balance of payments statistics: they define the basic concepts of the recognition of direct investments in the framework of the balance of payments. However, the importance of direct investments is increasing continuously with globalisation and the expansion of the operations of multinational companies. Special user requirements arise for more detailed breakdowns of direct investment data. That is, in addition to being an instrument within the BOP and IIP statistics, direct investments are increasingly becoming a separate set of statistical statements with their own methodology, users and analytical needs.

The OECD is the international organisation responsible for the development of the methodology for direct investment statistics. The Manual prepared by the OECD, the *Benchmark Definition of Foreign Direct Investment* (BD), is the most important international methodological guide. The methodologies for direct investments and for the balance of payments are harmonized with each other. However, while in the BOP statistics direct investment is only one of the functional categories observed, the OECD Manual is much more detailed, focusing more on meeting special user needs so as to provide sufficient information to statisticians and analysts working with direct investment. On issues of detail BPM6 repeatedly refers to BD4.[78]

The revision of BD3, published in 1996, started in 2004 and ran parallel with the revision of BPM5 . The new edition (BD4) was issued in April 2008. Since the previous edition, barriers to international capital movements have been removed, globalisation expanded, investors have created corporate structures of ever increasing complexity, they employ efficient methods of governance, financing and fund management, establish subsidiaries and allocate resources between countries to optimise the profitability of their investments. Diverse forms of investment have been developed, the operation of multinational companies has become more complex. The new methodology must reflect these changes as well. Accordingly, the most important element of the new methodology is a **more clear, precise definition of the Framework of Direct Investment Relationships (FDRI)**[79] **and the requirement of more detailed breakdown of data.** Most of the changes consists in the more detailed presentation of data with new breakdowns.

Major changes from the previous edition

- **Clarification of the Framework of Direct Investment Relationships**
  As compared to the framework used in the previous edition, which focused on vertical relations within a group of enterprises, due to the increased complexity of corporate structures it became necessary for the new framework (Framework of Direct Investment Relationships, FDIR) to take detailed account of relationships within the group of enterprises.

  The FDIR covers all members of a group of enterprises over which the investor has significant influence under a direct investment relationship. In respect of the **subsidiaries** of the investor this influence means equity in excess of 50% (control), while for **associates**, 10–50% (influence). It also covers **links between ownership chains.** If one or more ownership chains originate from one investor, every enterprise in every chain is in direct investment relationship.

- **The new methodology gives significantly greater emphasis to transactions and positions relating to fellow enterprises.**
  Fellow enterprises are members of a group of enterprises that have a common investor at some level but they have no equity links to each other or such links are below 10 per cent. The separate disclosure of transactions and positions between them is one of the most important changes from the previous edition, which is due to the increased importance

[77] The Manual is available from the OECD website: http://www.oecd.org/dataoecd/26/50/40193734.pdf.

[78] Users wishing to work with direct investment will find statistics with the most detailed breakdown in the OECD database (country, sector, instrument, etc.). http://www.oecd-ilibrary.org/finance-and-investment/data/oecd-international-direct-investment-statistics_idi-data-en.

[79] The Framework of Direct Investment Relationships (FDIR) is addressed in more detail in Chapter 3.4. of BD4 and Annex 4.

of capital reallocations through such other group members. Transactions and positions between fellow enterprises must be recorded among inward direct investment in the reporting country if the ultimate investor of the resident is non-resident, and among outward direct investment if the ultimate investor is resident. The new accounting method may change the level of foreign direct investment in the various countries considerably. This is because flows between fellow enterprises used to be reported under other investment rather than foreign direct investment.

Under the new methodology, which has also been adopted by the presentation of the balance of payments statistics, foreign direct investment flows and stocks will have to be reported separately depending on whether the investment is into the enterprises of the investor in direct investment relationship or it affects the transactions and positions of the enterprises vis-à-vis investors (this is reverse investment – see Footnote 36) or a transaction between fellow enterprises.

- **The concept, treatment and separate presentation of special purpose entities (SPEs) in the statistics.**
  Special purpose entities are effectively **special purpose subsidiaries** established by multinational companies or foreign investors to **exploit the benefits of the regulations of particular countries**. As the available benefits are country-specific, there are many kinds of special purpose entities.

  The observation of special purpose entities was a key concept already in the previous edition of the manual. At that time, the various types of SPEs and the characteristics of the various tax havens were discussed in the form of case studies. Then, the complexity of the arrangement only allowed for the presentation of the phenomenon and the settlement problems. Due to the different interests of countries, no internationally accepted definition had been approved. However, relying on the experience gathered in the meantime, in the 4th edition general principles could be formulated that may help in identifying and separating SPEs.

General international criteria to assist in the identification of SPEs:

1. The special purpose entity is a legal entity formally registered with a national authority and subject to fiscal and other legal obligations of the country concerned.
2. The enterprise is ultimately controlled by a non-resident investor.
3. The enterprise has no or few employees, little production in the host economy and minimal physical presence.
4. Most of the assets and liabilities of the enterprise relate to other countries.
5. Its core business is group financing, being a channel of funds between non-resident members of the group.

Due to the diversity of benefits to be exploited, the characteristics of special purpose entities may differ not only between countries but the (special) activities of SPEs may also change within a country as regulations and benefits change over time.

If statistics fail to separate special purpose entities from normal enterprises, **foreign direct investment figures will be distorted**. That is because transactions of exceptional size conducted with a view of profit optimisation will be mingled with capital movements reflecting real investor intentions. More particularly, capital movements triggered by profit optimisation inflate the investments recorded in a particular countries by an order of magnitude (and the withdrawal of equity is disclosed as a debt or income instrument or is separated from the investment in time), while these special purpose entities have minimal links to the economic trends of the country concerned, being mostly passive mediators, and they earn negligible income from transactions with residents. Therefore, even though in terms of the balance, they have negligible impact on the economy concerned, the size of investments captured by statistics is still very large.

The extent of distortion is exemplified by data for Hungary: while in 2009 the stock of inward investment of Hungary was 68 billion EUR without SPEs, it amounted to 179 billion EUR with SPEs. The stock of outward direct investment was 16 billion EUR without SPEs and 123 billion EUR with SPEs. The distortion has another aspect: if we look at figures including SPEs, foreign direct investment into the Netherlands is the highest in the world, and the outward direct investment of the Dutch is third in size.

So as to eliminate this distortion from the statistics, under the new methodology the OECD reporting requires separate figures with and without SPEs.

Considering that the BPM5 and BD3 methodologies are still in effect, which does not make the separation of SPEs "compulsory", countries must compile their international reporting under the international methodologies to cover all resident enterprises (including SPEs). Indicators facilitating comparison of the positions of countries (for example, the debt indicators) or the data on investments, which include SPEs, give a misleading picture of countries affected by SPEs.

Hungary also has considerable SPE activity; as a result, the figures containing SPE data are economically distorted. Thus Hungary also appealed to international organisations for the use of data excluding SPEs, which lend themselves to better economic analysis, in international databases and economic analyses.

Today, as a result of the distorting effects of SPEs, international organisations increasingly allow countries where SPEs significantly distort data to submit figures without SPEs under their international reporting obligations, and such data are then entered into international databases (Eurostat, ECB, OECD, UNCTAD, BIS).

With the introduction of the new methodologies (2014), data without, on and with SPEs will all be available in a comparative structure.

The identification and treatment of special purpose entities in Hungary and the problems encountered are discussed in detail in Section 2.1.3.1.

Direction of future methodological changes: research agenda

Similarly to BPM, issues remained outstanding at the closing of the revision in the case of the BD as well. These were placed on a research agenda for the BD4 also. In its last annex, the new manual lists all the unresolved issues and topics identified for future research. These show the direction of development of statistical methodology.

A brief overview of the major topics:

1. Special Purpose Entities

   a) Identifying non-resident Special Purpose Entities. The OECD recommends that countries report on a voluntary basis data looking through SPEs resident in the partner country, i.e., the country/sector of the investor is the first non-SPE investor and the investment country/sector is the first non-SPE investment country. For instance, if a Chinese investor invests in Hungary through Luxembourg and the Netherlands, then the funds move on from Hungary to Cyprus, then to Germany, this reporting must disclose an investment by China in Germany. Some countries already collect such data but there are still many unresolved issues in this field.

   b) Updating the typology of SPEs by typical activity. Given the changing nature of financing patterns of multinational enterprises, criteria may need to be revisited and a universal definition found.

   c) Segregating capital transiting through operational affiliates. In addition to SPEs, multinational enterprises also reallocate capital between countries via their operational subsidiaries. More work will be necessary to develop a practicable methodology to isolate such capital transiting in the case of an operational affiliate.

   d) Exploring the usefulness and feasibility of a register for SPEs.

2. Identification and segregation of *round tripping*. Round tripping refers to domestic funds which leave a country and return back as foreign direct investment to obtain tax benefits or for other reasons. [Investment (reinvestment in the home country) through Cyprus occurs in several countries].

3. Compilation of country and sector breakdown by ultimate host country. At present, there is sufficient methodological guidance on investment positions only for the breakdown by ultimate investing country. However, there are no approved guidelines on the mode and information to determine the ultimate host country for outward investments.

The unresolved issues listed above indicate that there is a growing need to be able to filter out various distortions to reveal the origin and destination of investments (from which country or sector into which country or sector) irrespective of the road they cover on the way there. Apart from theoretical problems, the main difficulty in compiling statistics in such manner is the source to obtain relevant information. Any country may impose reporting obligations only on (resident) enterprises operating there which can hardly have any information on where the capital moves from their country. Initiatives have been taken within the EU to resolve the absence of information: the establishment of an EU-level business register containing the register data of multinational companies (Euro Group Register – EGR), facilitating access for statisticians to certain business register information at least within the EU.

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

In Hungary the central bank is responsible for compiling the balance of payments and the internationalinvestment position, i.e specify the amount of and changes in assets and liabilities vis-à-vis non-residents. Up to 2014 the compilation of the balance of payments will be based on the international statistical methodology set out in the fifth edition of the Balance of Payments Manual of the IMF (BPM5).[80]

An overall statutory framework for the collection of data required for the statistics is provided in the Central Bank Act (Act LVIII of 2001 on the Magyar Nemzeti Bank) and the Act on Statistics (Act XLVI of 1993). The yearly reporting obligations are set out in the annually updated MNB regulation and in the National Statistical Data Collection Programme (OSAP).The content of the tables in the reports and the detailed methodological instructions for the completion of the relevant forms are available on the MNB website.[81]

The expansion of data requirements arising from the international reporting obligations of the MNB, the increasing complexity of financial relations and changes in the international regulatory environment necessitated methodological alterations in statistical data collection as well. In 2008 the Magyar Nemzeti Bank, in cooperation with the Hungarian Central Statistical Office (HCSO), implemented a new data collection system based on direct reporting for the compilation of balance of payments statistics. The central bank incorporates a number of statistical data on BOP instruments collected by the HCSO. These include: goods (from 2003); business services and travel (from 2004); other services (from 2005); compensation of employees and EU and household transfers (from 2008).

While in the previous system the compilation of the BOP mainly relied on the use of transaction codes for payments based on reports by credit institutions, in the new regime the MNB obtains the necessary information directly from economic entities. Large companies reporting the full set of BOP and IIP statistics on a monthly basis, a sample of SMEs (based on a value limit) reporting on a quarterly or yearly basis, supplementary subject-specific questionnaire surveys and various estimation methods play a central role in the compilation of the statistics.

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

[80] On the implementation of BPM6, see Section 1.5.4.
[81] See also balance of payments minisite: http://english.fma.mnb.hu/.

Table 1
Division of labour between the HCSO and the MNB

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

The published balance of payments statistics distinguish four institutional sectors:

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

In 1996 the Magyar Nemzeti Bank has joint the Special Data Dissemination Standard (SDDS[82]) of the International Monetary Fund and in accordance with its requirements, it releases metadata, a comprehensive methodology and a release calendar for the balance of payments (and the other macroeconomic statistical categories required in the standard).

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 presents the various instruments. For the entries of the financial account, the transaction and stock data are discussed within the instrument concerned. We tried to apply standard considerations to each item, thus every description contains a brief discussion of the instrument concerned, the data source(s) used[83], any estimate(s) applied, the methodological specialities of the instruments, the revision policy applied and the way it is presented in the standard publications.

[82] For more detail on the SDDS, see Footnote 35. The Hungarian page of the SDDS can be found here: http://dsbb.imf.org/Pages/SDDS/CtyCtgList.aspx?ctycode=HUN.

[83] The data reporting used for the balance of payments statistics is discussed in more detail in Section 2.2.3., while Chart 21 at the end of Section 2.1.2. summarises data sources by instrument.

2.1.2.1 The current account

Chart 8
The current account

	Credit	Debit	Net
I. Current account (1+2+3+4)			
1. Goods			
2. Services			
3. Income			
4. Current transfers			

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

Goods

Chart 9
Goods

	Credit	Debit	Net
1. Good			
1.1. Exports			
1.2. Imports			

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

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

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

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

- Trade in goods data in the balance of payments are to be valued f.o.b. (i.e. the value at the customs frontier of the exporting economy), thus the c.i.f. value of imports (i.e. the value at the Hungarian frontier) recorded in the external trade statistics is replaced by the HCSO to the f.o.b. value for the compilation of balance of payments statistics.[84]
- Due to the nature of external trade data collection, the trade in goods relating to non-resident enterprises that are only registered for VAT in Hungary contain a value added that does not belong to the resident economy; consequently, this value added must be removed from the balance of payments, and the national accounts, through an estimated adjustment.[85]
- 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

[84] The c.i.f./f.o.b. adjustment is discussed in detail in section 2.1.3.3.
[85] VAT resident status is discussed in detail in Section 2.1.3.2.

frontier as the buyer does not want to keep them (this case is different from goods shipped, for instance, for participation in exhibitions then shipped back, where no change of ownership occurred in the first place). The adjustment for returned goods has no effect on the trade balance (export becomes reversed imports, imports reversed exports).

• Certain items of trade in goods included in the balance of payments (e.g. 'bunker' fuel in vehicles, fees for repairs) are not included in external trade statistics. For these trade transactions the MNB also receives data from the HCSO based on the quarterly questionnaires on services and uses them to supplement the external trade figures reported.

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

In respect of goods, the HCSO revises months 1-12 of the previous year in March and months 1-12 of the previous year and months 1-6 of the reference year in September. The MNB takes such revisions into account in its own publications in March and September.

Services

Chart 10
Services

	Credit	Debit	Net
2. Services total			
2.1. Transportation services			
2.2. Travel			
2.3. Other services			
2.3.1. Communications services			
2.3.2. Construction services			
2.3.3. Insurance services			
2.3.4. Financial services			
2.3.5. Computer and information services			
2.3.6. Royalties and licence fees			
2.3.7. Other business services			
2.3.8. Personal, cultural and recreational services			
2.3.9. Government 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. Main data sources include direct corporate questionnaires, border surveys and administrative data. The source of the travel data is the border survey conducted by the HCSO, where Hungarians returning from abroad and foreigners leaving Hungary are asked about their expenses related to financing their travel. The main data source for other services is the questionnaire completed by the enterprises supplying and purchasing foreign trade services as well as administrative sources (e.g., for government and insurance services).

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

Re-exports are recorded in accordance with the international methodology, on a net basis. Under insurance services only the service included in the premium[86] rather than the total premium is recorded as a service (the remaining part[87] being disclosed under transfers.)

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.

Income

Chart 11
Income

	Credit	Debit	Net
3. Income			
3.1. Compensation of employees			
3.2. Direct investment income			
3.2.1. Income on equity			
3.2.1.1. Dividends and distributed income			
3.2.1.2. Reinvested earnings			
3.2.2. Income on debt			
3.3. Portfolio investment income			
3.3.1. Income on equity securities			
3.3.2. Bonds and notes			
3.3.3. Money market instruments			
3.4. Other investment income			

Labour income (compensation of employees employed for less than one year), direct investment income, portfolio investment income and income from other investment are recorded separately. Since 2004, income has been accounted on an accrual basis in the balance of payments statistics; previously, a cash basis of accounting had been used.

Compensation of employees

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

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

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

[86] Gross premiums payable by policyholders to maintain insurance cover and premium supplements payable.
[87] Total income including premium supplements net of service charges.

Direct investment income[88]

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

The source of the data is the monthly, quarterly and yearly reports supplied to the MNB. After September following the reference year, reinvested earnings for the total economy are calculated based on the data from annual reports and corporate tax returns. Up to the end of September of the subsequent year, the equity income figure, including reinvested earnings, is an estimate. The estimate is based on forecasts of the stock of investment and of its profitability.[89]

Dividends

Dividends are distributed earnings allocated to the owners of equity. Dividends must be recorded in the period when the owners declare the distribution of dividends.

Upon the introduction of the new data collection system, in 2008 it became possible to record dividends at the time they are declared payable based on the monthly and quarterly questionnaires.[90]

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

Reinvested earnings

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

As a result of accrual accounting, the value of equity income depends exclusively on the income generated in the reference year – it may be negative if the enterprise made a loss – and thus irrespective of the dividends declared payable or actually paid. The difference between the positive or negative adjusted profit after tax and the dividend declared in the period concerned is reinvested earnings. As dividends may be declared from profits other than the current year's, reinvested earnings may be negative even where the corporation makes a profit, reflecting the fact that the investor withdrew more income from the enterprise at the expense of the equity of the enterprise.[91]

Following from the accounting technique, the income account balance is not affected by the decision made on the distribution of income as the same amount is recorded, with the opposite signs, once as dividend and then as reinvested earnings. The greater deficit of the current account due to reinvested earnings is always financed automatically in the financial account, requiring no additional funds to be raised. Table 2 summarizes the effect of the recording of the declared and paid dividends, after-tax profits and reinvested earnings on the income and expenditure sides of the various instruments.

There are two procedures for the calculation of direct investment income to measure corporate income: the concept taking all elements of profits, including e.g. foreign exchange gains or losses and losses from the write-off of assets (all-inclusive concept) and the one leaving those elements out and taking into account only profits from normal operations (current operating performance concept, COPC). Up to 2008, balance of payments statistics applied the all-inclusive concept. The introduction of the corporate questionnaires collecting more detailed information in 2008 facilitated the elimination of income components not related to day-to-day operations, thus the application of the COPC adjustments recommended by international statistical methodologies.[92]

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

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

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

[91] According to BPM6, dividends paid from reserves (extraordinary dividend/superdividend) will have to be treated in the financial account as a withdrawal of equity rather than as dividend. The exceptional nature of extraordinary dividends is shown by their level being greatly in excess of previous dividends and of trends in earnings. The excess above the regular level of earnings must be shown as a withdrawal of equity.

[92] For more details on the COPC adjustment, see Section 2.1.3.4.

Table 2
Recording of declared dividends, after-tax profits and reinvested earnings in the balance of payments

Instruments	Content of the recording	
	Credit	Debit
3.2. Foreign direct investment income		
3.2.1. Income on equity*		
3.2.1.1. Dividends		
3.2.1.1.1. Dividends of OFDI	recording dividends declared payable on OFDI	
3.2.1.1.2. Dividends of IFDI		recording dividends declared payable on IFDI
3.2.1.2. Reinvested earnings		
3.2.1.2.1. Reinvested earnings of OFDI	recording OFDI profits* minus dividends declared payable	
3.2.1.2.2. Reinvested earnings of IFDI		recording IFDI profits* minus dividends declared payable
7.1. Foreign Direct Investment abroad		
7.1.1.1. Equity abroad		
7.1.1.2. Reinvested earnings abroad	recording dividends declared payable on OFDI	recording OFDI profits*
7.1.2.1. Other capital, assets	recording OFDI dividends paid	recording dividends declared payable on OFDI
7.1.2.2. Other capital, liabilities		
7.2. Foreign Direct Investment in Hungary		
7.2.1.1. Equity in Hungary		
7.2.1.2. Reinvested earnings in Hungary	recording IFDI profits*	recording dividends declared payable on IFDI
7.2.2.1. Other capital, assets		
7.2.2.2. Other capital, liabilities	recording dividends declared payable on IFDI	recording IFDI dividends paid

OFDI: Outward Foreign Direct Investment
IFDI: Inward Foreign Direct Investment
** Based on after tax profits, that are recorded according to Current Operating Performance Concept.*

Other income

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

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

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

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

Portfolio investment income

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

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

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

Other investment income

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

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

For households, estimates are available based on the data supplied to the National Tax and Customs Administration of Hungary pursuant to the Council Directive 2003/48/EC by countries disclosing information on the annual interest income of Hungarian private persons.[93]

Current transfers

Chart 12
Current transfers

	Credit	Debit	Net
4. Current transfers			
4.1. General government (S.13)			
– of which: EU transfers			
4.2. Other sectors (S.1-S.13)			
– of which: EU transfers			

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

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

Until 2009 September, the balance of payments contained transfers from the European Union on a cash basis, i.e., the funds received from the Commission were recorded at the time of their receipt as unrequited current or capital transfer income. Since then, however, we have adopted accrual accounting, therefore transfers are recorded at the time of their use as unrequited (current or capital) transfers. Accrual data had been back casted until 2004. Another significant change impacts on the sectoral breakdown of data: they need to be recorded directly as the revenue of the final beneficiary.[94]

[93] Savings directive http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:157:0038:0048:en:PDF.
[94] The treatment of EU transfers is described in detail in Section 2.1.3.5.

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

2.1.2.2 Capital account

Chart 13
Capital account

	Credit	Debit	Net
II. Capital account (5+6)			
5. Capital transfers			
5.1. Capital transfers of general government (S.13)			
– of which: EU transfers			
5.2. Capital transfers of other sectors (S.1-S.13)			
– of which: EU transfers			
6. Acquisition/disposal of non-produced, non-financial assets			

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

In respect of the instruments in the capital account, the standard revision policy of the MNB for the balance of payments statistics is applicable. This policy is explained in Section 2.3.3. Revision Policy.

Capital transfers

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

The source of data is the HCSO for the general government and direct reporting by economic entities for other sectors.

Acquisition/disposal of non-produced, non-financial assets

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

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

2.1.2.3 The financial account and the international investment position

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

In other words, the reserves are part of the financial account on the one hand, while in terms of presentation they are generally shown outside the total balance of payments, as evident in our tables. That is because the financial account shows how the transactions in the current and capital accounts are financed. If, for example, the balance of the current and capital accounts shows a deficit, there is a need to borrow or to resort to reserve assets.

Chart 14
Balance of Payments lines other than the current and capital accounts

III. Financial account (7+8+9+10)
7. Direct investment
8. Portfolio investment
9. Financial derivatives
10. Other investment
IV. Net errors and omissions
V. Overall balance (I+II+III+IV)
VI. International reserves

Under the balance of payments methodology, international reserve assets are liquid assets controlled by and readily available to monetary authorities: in the event of payment difficulties they can be used directly to perform payment, indirectly to ease financial pressure by intervention in exchange markets to affect the exchange rate of the national currency or for any other purposes. The balance of payments reveals whether there is a surplus or deficit in financing and it restores equilibrium by adjusting the level of reserves as appropriate for the balance. (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 with the structure of the financial account and it corresponds to the classification of the investment income categories in the current account. This assures the reconciliation of flow and stock data and the consistent accounting for the earnings related to the various investment categories.[95]

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

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

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 2.3.3. Revision Policy.

Direct investment

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

For *equity capital* within direct investment, the transaction data are obtained from monthly and quarterly questionnaires, stock data from yearly questionnaires[96]. For *other capital*, flow and stock data are derived from monthly and quarterly questionnaires. Enterprises are added to the sample of respondents to the quarterly and yearly questionnaires based on a threshold.[97]

[95] With the exception of the separate presentation of income on international reserve assets, which is introduced as a supplementary item only in BPM6.
[96] In the interim periods during the year and until the publication of the yearly questionnaires (t+9 months) stocks are derived as the sum of the stock data from the previous year and of monthly transaction, revaluation and other change in stock data.
[97] For a more detailed description, see Section 2.2.3. Description of data collection questionnaires.

Chart 15
Direct investment

- **7. Direct investment other capital**
  - 7.1. In abroad
    - 7.1.1. Equity capital and reinvested earnings
      - 7.1.1.1. Equity capital
      - 7.1.1.2. Reinvested earnings
    - 7.1.2. Other capital
      - 7.1.2.1. Assets
        - 7.1.2.1.1. Claims due to dividends declared but not paid
        - 7.1.2.1.2. Credits
        - 7.1.2.1.3. Intercompany accounts, cash-pool
        - 7.1.2.1.4. Trade credits
        - 7.1.2.1.5. Debt securities
        - 7.1.2.1.6. Other assets
      - 7.1.2.2. Liabilities
        - 7.1.2.2.1. Liabilities due to dividends declared but not paid
        - 7.1.2.2.2. Credits
        - 7.1.2.2.3. Intercompany accounts, cash-pool
        - 7.1.2.2.4. Trade credits
        - 7.1.2.2.5. Debt securities
        - 7.1.2.2.6. Other liabilities
  - 7.2. In Hungary
    - 7.2.1. Equity capital and reinvested earnings
      - 7.2.1.1. Equity capital
      - 7.2.1.2. Reinvested earnings
    - 7.2.2. Other capital
      - 7.2.2.1. Assets
        - 7.2.2.1.1. Claims due to dividends declared but not paid
        - 7.2.2.1.2. Credits
        - 7.2.2.1.3. Intercompany accounts, cash-pool
        - 7.2.2.1.4. Trade credits
        - 7.2.2.1.5. Debt securities
        - 7.2.2.1.6. Other assets
      - 7.2.2.2. Liabilities
        - 7.2.2.2.1. Liabilities due to dividends declared but not paid
        - 7.2.2.2.2. Credits
        - 7.2.2.2.3. Intercompany accounts, cash-pool
        - 7.2.2.2.4. Trade credits
        - 7.2.2.2.5. Debt securities
        - 7.2.2.2.6. Other liabilities

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

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

For direct investments, classification is based primarily on the direction of investment rather than an asset/liability breakdown. Accordingly, we present direct investment in an inward/outward breakdown, further detailed by equity capital, reinvested earnings and other capital.[98]

Equity capital:

- *Direct investment abroad, Equity capital* transactions contain registered capital- or capital reserve increase or decrease by residents in non-resident enterprises as well as the acquisition or sale of equity by a resident investor in a non-resident enterprise.

- *Direct investment in Hungary, Equity capital* transactions contain registered capital- or capital reserve increase or decrease by non-residents in enterprises registered in Hungary as well as the acquisition or sale of equity by a non-resident investor in a resident enterprise.

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

Reinvested earnings:

The reinvested earnings recorded within *direct investment abroad in the financial account*is identical with the recorded the reinvested earnings as income credit in the current account, while the *reinvested earnings* within *Direct investment in Hungary* equals the reinvested earnings as income debit in the current account.[99] (C.f. Table 2)

In an amount identical with the COPC adjustment[100] but with an opposite sign, we record price changes on equity securities, exchange rate changes or other stock changes, depending on the nature of the adjustment in reinvested earnings, to adjust the size of after-tax profits.

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

The introduction of the corporate questionnaires facilitated the breakdown by country and activity of direct investment equity stocks since 1998, while the breakdown of transaction data has been available since 1999.

In accordance with international methodology guidelines, the activity breakdown of published direct investment data shows the *activity of the resident party under transactions*, that is, it indicates the activity of the investment enterprise for inward direct investment and the activity of the investor for outward direct investment. In the case of stocks, the activity breakdown indicates the *activity of the investment*, that is, the activity of the resident investment enterprise for inward direct investment (similarly to flows) while for outward direct investment, it indicates the activity of the non-resident direct investment enterprise. That means that the activity breakdowns of flows and stocks are not comparable in the case of outward direct investment.[101]

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[98] Because of the special interest by users, statistics on direct investments, in different breakdowns and frequencies, are collected on a separate page on the MNB website, at the following link:
http://english.mnb.hu/Statisztika/data-and-information/mnben_statisztikai_idosorok/mnben_elv_external_trade/mnben_kozetlen_tokebef.
Within the balance of payments statistics, special purpose entities (SPEs) have the strongest impact on the instruments of direct investments, therefore data are disclosed both including and excluding special purpose entities. SPEs are discussed in more detail in the subsection on Special methodological issues.

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

[100] For more details, see Section 2.1.3.4.

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

Other capital:

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

Since 1995, other capital data has contained other, non-equity-related debt relationships between the parent and the subsidiaries.[102] Since 2002, financial transactions vis a vis clearing centres within an enterprise group have also been recorded as direct investment other capital.[103] Since 2008, other intragroup assets and liabilities relating to group members have been recorded fully in this category.

Within other capital, there are assets and liabilities due to dividends; credits; intercompany accounts, cash pool; trade credits; debt securities; as well as other assets and liabilities including the ones relating to capital paid up but not registered. Of the aforesaid instruments, trade credits within direct investments have been recorded only since 2008. Furthermore, the assets and liabilities of banks and other financial intermediaries on/to their parents and subsidiaries have been included among other investment rather than under direct investment since 2008.

Assets and liabilities relating to fellow enterprises are classified under the directional principle depending on whether the reporting entity has any non-resident direct or indirect investor (parent) or direct or indirect investment abroad (subsidiary).

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

Before 2008, other capital was recorded only based on (settlements) cash flows; stocks were calculated by the accumulation of flows and revaluations. Therefore there was no stock data available in a breakdown by country and activity. Since the introduction of the new data collection system in 2008, other capital stock information has also been reported by data suppliers, thus country and activity breakdowns can be generated.

Portfolio investment

Investment in market securities is recorded within this category.

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

The primary source of data is the securities statistics, which monitors stocks of Hungarian securities held by non-residents and foreign securities held by residents, by instrument, based on the reporting of Hungarian custodians and direct corporate

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

[103] Previously these transactions and the related stocks had been recorded under other investment.

Chart 16
Portfolio investment

8. Portfolio investment
- 8.1. Assets
  - 8.1.1. Equity securities
  - 8.1.2. Bonds and notes
  - 8.1.3. Money market instruments
- 8.2. Liabilities
  - 8.2.1. Equity securities
  - 8.2.2. Bonds and notes
  - 8.2.3. Money market instruments

questionnaires. Data supplied by custodians is supplemented by the stock of securities in custody outside Hungary as reported by resident owners. Transactions are calculated from changes in stock, after adjustment for price and exchange rate fluctuations.

Published data are generated with the help of the report supplementing the data extracted from the securities statistics system. Bills and unsecuritized equity participations below the 10% ownership threshold are observed through the data collection for the balance of payments using direct corporate questionnaires.

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

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

Financial derivatives

Chart 17
Financial derivatives

9. Financial derivatives
- 9.1. Assets
- 9.2. Liabilities

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

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

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

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

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

Other investment

Chart 18
Other investment

10. Other investment
- 10.1. Assets
  - 10.1.1. Short-term
    - 10.1.1.1. Credits and loans
    - 10.1.1.2. Currency and deposits
    - 10.1.1.3. Other assets
    - 10.1.1.4. Trade credits
  - 10.1.2. Long-term
    - 10.1.2.1. Credits and loans
    - 10.1.2.2. Currency and deposits
    - 10.1.2.3. Other assets
    - 10.1.2.4. Trade credits
- 10.2. Liabilities
  - 10.2.1. Short-term
    - 10.2.1.1. Credits and loans
    - 10.2.1.2. Currency and deposits
    - 10.2.1.3. Other liabilities
    - 10.2.1.4. Trade credits
  - 10.2.2. Long-term
    - 10.2.2.1. Credits and loans
    - 10.2.2.2. Currency and deposits
    - 10.2.2.3. Other liabilities
    - 10.2.2.4. Trade credits

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

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

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

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

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

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

International reserves

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

International reserves include, in accordance with the international methodology,

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

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

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

Table 3
Sources of data

Balance of payments instruments	Financial and non-financial corporations	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	n. a.	n. a.
Portfolio investment income	observed	observed	observed/estimated
Other investment income	observed/estimated	observed/estimated	estimated
Current transfers	observed/estimated	observed/estimated	observed/estimated
of which: EU transfers	observed/estimated	observed/estimated	observed/estimated
Capital transfers	observed	observed	n. a.
of which: EU transfers	observed/estimated	observed/estimated	observed/estimated
Foreign direct investment – shares	observed/extrapolated	n. a.	estimated/n. a.
Foreign direct investment – other equity	observed	n. a.	n. a.
Portfolio investment	observed	observed	observed/estimated
Financial derivatives	observed	observed	n. a.
Other investment	observed/estimated	observed/estimated	observed/estimated

For the observed data, only those transactions are recorded that exceed the threshold specified for the instrument concerned.

The method of grossing up of direct investments is described in: http://english.mnb.hu/Root/Dokumentumtar/ENMNB/Kiadvanyok/mnben_statisztikai_kiadvanyok/mukt_en.pdf.

2.1.3 Special methodological issues

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

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 the 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, the Hungarian companies mostly played a passive intermediary role in transactions, thus they had negligible income from transactions with residents. Unless they changed their activities, we classified them among special purpose entities. The other class consisted of off-shore enterprises that also had some real economy operations or that switched to normal operation. These were reclassified as normal enterprises.

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

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

Some criteria used in practice:

- In their balance sheets, the ratio of non-financial assets is negligible as compared to financial assets, with the latter consisting mainly of equity, long-term loans and securities.
- Their turnover derives primarily from export revenue and it does not exceed HUF 500 million annually.
- The number of staff tends to be very low (1-3 persons).
- They typically have high registered capital (capital reserve), which they lend immediately or they purchase equity participations abroad or establish branches abroad.
- They have no subsidiary in Hungary. If, however, the SPE criteria are satisfied both for a resident enterprise and its resident subsidiary, i.e., their operations dominantly relate to the rest of the world, the two enterprises together are considered to be an SPE.
- Their material cost is negligible.
- The name of the enterprise refers to the off-shore nature of the activity.

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 equity often leaves the country in the form of lending, or a loan leaves as equity investment or income, rendering the interpretation and analysis of the transactions more difficult.

  As an important feature of enterprises operating abroad, they move around relatively large volumes of capital, thus their transactions inflate particularly the gross components of the financial account. 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 fall into different classes of 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 on-lend 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 transfer their business to those branches. The most recent development is to recover the capital from the foreign branch and establish a subsidiary in yet another country.

- The definition of SPEs may also change over time.

Under our former approach, SPEs by definition were 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 such items (certain types of services) and volumes in their balance sheets and income statements that call for the reconsideration of our past approach.[104] 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.

Issues relating to the presentation of the data of special purpose entities

To eliminate the distortion caused by SPE data, the MNB has compiled and published on its website balance of payments and international investment position data with and without SPEs since 2006.

The interpretation of the significant difference between the two data sets presents a difficulty in all countries where, like in Hungary, special purpose entities have a significant presence. That is because for the time being statistical databases set up by international institutions are unable to show two types of data (with and without SPEs) for a single country.

2.1.3.2 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 without a physical presence subject only to VAT registration. These so-called VAT registrations are issued tax numbers and their founders may make their trade-related VAT payments through these entities. For the purposes of the balance of payments and the national accounts, these VAT registrations are not part of the Hungarian economy. However, as the register of intra-Community trade statistics (Intrastat) relies on VAT payments, the VAT registrations are considered to be data suppliers for the purposes of Intrastat. Consequently, they need to report on external trade transactions they conduct with non-residents to resident statistical offices, in the case of Hungary to the HCSO. Thus the turnover of these VAT residents is also included in the trade balance data compiled by the HCSO.

The statistical problem is that through this VAT registration the non-resident enterprises realise value added that is included in the external trade statistics of the HCSO while it is not present on the financing side, the financial account of the balance of payments. When the HCSO data are used without adjustment, this value added (the difference between the prices applied to the resident and non-resident parties) is a cause of a statistical error in the balance of payments as the figures entered in the books of the resident counterparties are shown in the financial account; furthermore, in reality they

[104] The issue of the treatment of SPEs is also present in the compilation of national accounts. In 2009 Eurostat set up a task force to address this problem and issued recommendations for the treatment of SPEs *(Task Force on the recording of certain activities of multinationals* – TF MUNA – in national accounts.) The recommendations classify SPEs into 11 groups, among them trading and leasing companies. This categorisation is not fully in line with the criteria applied for the purposes of balance of payments statistics. If were are to maintain conformity between the balance of payments and the national accounts, we must revisit the SPE criteria. This requirement is also included in the OECD's research agenda of BD4 (see Section 1.5.5.).

do not belong to the resident economy. Having realised the problem, the compilers of the balance of payments – and of the national accounts – prepared an estimate for the level of the value added concerned and in September 2008, revised the statistics concerned retroactively to 2004, reducing export and increasing import volumes.[105] Since September 2008, the adjustment of trade in goods data for VAT residents has been an ongoing exercise.[106]

The purpose of the revision of 2008 was to assure that value added relating to VAT registration in Hungary and included in the external trade statistics of Hungary but not accruing to the domestic economy is not recorded by the MNB and HCSO in the balance of payments and national accounts; a macro-assessment procedure was applied to this end. In September 2011 another revision was conducted in this area. This was necessary because in the case of certain companies the value added and to be adjusted due to sales through VAT registration is significantly different from the value used in the macro-assessment; furthermore VAT registrations of Hungarian companies in other countries also appeared. Since the publication in September 2011, the adjustments to the trade in goods figures applied in the balance of payments and the national accounts have taken into account both the macro-estimate used since September 2008 and the more recent changes announced in September 2011.

2.1.3.3 The methodology of the CIF-to-FOB adjustment

For the accounting treatment of trade in goods in accordance with the balance of payments and national accounts methodologies, the external trade in goods data collected at border values need not be adapted to obtain FOB values for exports, but adaptation is required for imports. The external trade in goods data compiled by the HCSO show imports of goods at a value including charges incurred up to the Hungarian frontier, while the balance of payments and national accounts methodologies require the use of values up to the exporter’s customs frontier. Therefore, all the countries, including almost every Member State, that use the external trade data collected by statistical offices for the compilation of the balance of payments implement a so-called CIF-to-FOB adjustment, whereby the value of the imports of goods is reduced to the value at the exporter’s customs frontier.

The CIF-to-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 terms was generated using a single rate for the total economy, the level of which was calculated by the HCSO using the customs statistics data, which were not comprehensively available at the time (2.66%). During the review of the CIF-to-FOB adjustment methodology the need arose to introduce more detailed breakdowns by partner countries, goods and modes of transport.[107] Also, in recent years increasing numbers of Member States implemented methodological reviews in this field; by now, they make up the majority. There are two primary methods to obtain the information needed for the additional calculations: to collect additional data to assess the differentiation of the adjustment along the aforementioned criteria, 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 route.

Under the cooperation of the HCSO and the MNB, new estimates for the CIF-to-FOB adjustment rates were completed by 2010 and the two institutions published them in September 2010 in the balance of payments and national accounts, retroactively to 2004. Since then, publications have used the new methodology. Not only do the new figures rely on much more differentiated adjustment rates but the former whole-economy rate has also been modified (from 2.66% to around 2%). As a result, the country breakdown of the imports of goods as well as the value of the imports of goods for the whole economy has changed.

2.1.3.4 Methodology of the COPC adjustment

Pursuant to international statistical standards, only profits from the *normal course of business* of an enterprise should be recorded as direct investment income. Any income arising outside the normal course of business, as a result of

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[105] For details, see pages 7-8 of the press release for the publication of 30 September 2008.

[106] This adjustment had no effect on the external trade in goods data of the HCSO as those figures are generated in accordance with the EU directives. During the compilation of the balance of payments and the national accounts, statisticians face this problem in the context of the reconciliation of different data sources.

[107] The use of a single CIF-to-FOB adjustment rate for the total economy would mean, for instance, that the CIF and FOB values for trade with neighbouring countries are different, while methodologically they should be identical.

"extraordinary" factors, must be filtered out.[108] The removal of extraordinary elements is vital if we are to allocate changes in the net worth of the company statistically correctly among income, revaluation and other stock changes. This procedure is called COPC adjustment in the methodology. The introduction of the new data collection system in 2008 facilitated income allocation in accordance with the COPC.

The sign of the COPC adjustment, modifying 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 new accounting framework, in the balance of payments the value of the COPC adjustment is deducted from the after-tax profit reported by the enterprise. This means that in the case of extraordinary losses, the adjustment increases the income recorded in statistics as compared to the reported figures and, conversely, it reduces reported income in case extraordinary profit is generated.[109]

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

Because of the outstanding significance of the items to be eliminated, under BD4 the all inclusive concept of income accounting is no longer recommended.[110] For countries where income is still recorded on an all-inclusive basis, the OECD recommends that supplementary information is provided for extraordinary components in aggregate to facilitate the interpretation of data.

Table 4
Income items considered for the COPC adjustment

Serial number	Definition
01	Amount paid for severance pays (–)
02	Loss of value on stocks and receivables (–)
03	Backmarking loss of value on stocks and receivables (+)
04	Accelerated descripton of tanglible assets (–)
05	Backmarking accelerated descripton (+)
06	Loss of value on financial assets reduces with backmarking (–)
07	Amounts paid/accounted/payable in relation to claims (–)
08	Amounts received in relation to claims (+)
09	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 og extraordinary result that is not listed above [the prefix is (–) if it is a loss, and (+) if it is a gain]
19	TOTAL (01+02+….+18)

[108] The term "extraordinary" as used here is not the same as the content of the "extraordinary" label used for the accounting profit category.

[109] The financial crisis of 2008 highlighted the importance of eliminating extraordinary components (e.g., foreign exchange losses, loss on revaluation, etc.). For instance, in 2008 the adjustment to the investments of residents abroad was HUF 110 billion extraordinary profit, which had to be deducted from the HUF 289 billion reported after-tax profit, while for the investments of non-residents in Hungary the adjustment amounted to HUF 312 billion extraordinary loss, which was deducted from the reported after-tax profits of HUF 1030 billion. In contrast, in 2009 the HUF 284 billion after-tax profits on the investments of residents abroad contained HUF 24 billion of extraordinary losses, while the reported profit after taxation of investments of non-residents abroad amounted to HUF 561 billion and included HUF 616 billion of extraordinary loss.

[110] In practice, this means the recording of income on the basis of corporate after-tax profits.

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

2.1.3.5 Accounting for EU transfers

In the balance of payments, the treatment of EU transfers was harmonized with the national accounts methodology in September 2009.[111]

The treatment of payments into the EU budget is regulated in detail by ESA95, 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, VAT related and sugar industry contributions are treated as taxes on products. Income transfers by national governments (GNI based contribution and the "UK correction") are recorded as other current transfer expenditure.

ESA95 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.[112] 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 as unrequited (current or capital) transfers at the time they are used. 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 as unrequited (current or capital) transfers 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 (non-financial 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 (non-financial 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.

(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 current or capital transfer revenues of

[111] Previously, fund received from the European Commission and payments into the EU budget were recorded in the balance of payments on a cash basis at the time when they were received or paid, as current transfer or capital transfer revenues or expenditures. The transfers were shown as revenues of the central government, except for direct producer subsidies granted from the European Agricultural Guarantee Fund, which were recorded as revenues of non-financial corporations and households.

[112] *Manual on Government Deficit and Debt:* http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-09-017/EN/KS-RA-09-017-EN.PDF.

the central government which are actually used by the institutions of the central government subsector. The remaining revenues are allocated to local governments, non-financial corporations, households and non-profit institutions (serving households).

2.2 IMPLEMENTATION OF THE NEW DATA COLLECTION SYSTEM

2.2.1 Design and operation of the system

Historical background

In Hungary, a decision was adopted in 2005 on the implementation of a direct data collection system within the scope of responsibility of the MNB in order to comply with the quality standards set out in international methodologies for balance of payments statistics. The Magyar Nemzeti Bank as the national institution responsible for the compilation of balance of payments statistics must do its utmost to provide users within and without Hungary with statistical data of adequate quality.

In the nineties, the settlement system in itself no longer provided adequate quality data.[113] With the progress of foreign exchange liberalisation, it was no longer sufficient to query resident banks as economic entities were able to make transfers to one another through non-resident banks and they could also enter into offsetting arrangements involving no cash movements. Thus, as a supplementary source of information, direct reporting was introduced for the enterprises concerned. As settlement system observed cash movements, additional information was required to produce accrual based data.

Before 2008, the compilation of BOP and IIP statistics increasingly required the use of information from different sources, with completely different characteristics. In respect of different subaccounts and sectors, the MNB had already used sources other than the settlement system reports of banks and corporations. In line with general European trends, Hungary had also started to replace indirect reports (by banks) in certain fields before 2008. This is why the observation of direct investment through questionnaires was implemented in 1999 and the trade in goods and services statistics of the HCSO were incorporated in 2003 and 2004. With the introduction of accrual accounting for investment income, the importance of estimated data relative to reported data had been growing before 2008 already.

In 2005, when Hungary took the decision to adopt the new system, 11 of the 25 EU Member States were using direct data collection systems. By 2008 that figure rose to 14, with more countries planning the changeover. Before the decision on the revision of the data collection system, we examined and analysed the systems of several Member States.

Designing the new data collection system, we strived to find the optimum among three factors: the statistical reporting requirements, quality expectations regarding statistics and the costs of production of statistics. In addition to the settlement system being costly, it also slowed down cash movements as every cross-border payment had to be assigned transaction codes; moreover, the change of legal requirements in the EU also necessitated the revision of the data collection system. A decision was made by the EU to introduce a threshold of 12,500 as of 1 January 2002[114], below which banks could not be required to assign transaction codes. This arrangement no longer assured adequate data quality, particularly for instruments involving small remittances (e.g., household transfers). The reporting threshold was increased to EUR 50,000 from 1 January 2010, though the move had been proposed for 2006 originally.[115] Concurrently with the increase of the threshold for transaction coding to EUR 50,000, the Commission also expressed its intention to abolish the threshold in the future to promote the lowering of the cost of intra-Community remittances, contributing to increased competitiveness and the reinforcement of the single euro payments area. The survey of the Commission in 2008 revealed that substantial cost savings were achieved in the economies of countries adopting direct reporting.[116]

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[113] In continental Europe, at the time of the foreign exchange controls after WWII, central banks monitored cross-border payments to manage foreign exchange reserves; this led to the natural evolution of the database relying on the observation of cash movements as the basis of the compilation of balance of payments statistics.

[114] Regulation (EC) No 2560/2001 of the European Parliament and of the Council of 19 December2001 on cross-border payments in euro: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:344:0013:0016:EN:PDF.

[115] Regulation (EC) No 924/2009 of the European Parliament and of the Council of 16 September 2009 on cross-border payments in the Community and repealing Regulation (EC) No 2560/2001: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:266:0011:0018:EN:PDF.

[116] The survey is available from: http://eur-lex.europa.eu/SECMonth.do?year=2008&month=10.

Implementation of the new data collection system

The project for the preparation of the new data collection system had the following main activities and milestones:

- In August 2004 a conceptual study was completed on the compilation of the balance of payments statistics and the data collection system, which gave an overview of international practice and proposed a resolution to the MNB management for the introduction of a new data collection system.

- In April 2005 the MNB management decided to launch the project; the project organisation was set up with members from the statistics as well as legal, IT and communication functions of the MNB. The project set up four working groups: the conceptual working group, the survey form working group, the communication working group and the register working group.

- The MNB officially notified the HCSO of the launch of the project and requested the assistance of the HCSO management and experts. During the project, HCSO staff participated in the work of all four working groups in various forms as required.

- In June 2005 a decision was taken on the countries which practice the MNB would regard as benchmarks. The selected countries were Austria, the Netherlands and Finland.

- In September 2005 the managements of the MNB and the HCSO signed a memorandum of understanding on the division of labour following the implementation of the new data collection system, and a decision was adopted to eliminate duplications. Accordingly, only one of the institutions would collect data on any economic phenomenon and the exchange of data between the institutions would assure the flow of information and their mutual use without additional costs. The elimination of duplicate data collection was met favourably by reporting entities. The easing of burdens on reporting entities resulted in savings on the administration costs of economic units on the level of the total economy.

- At the heart of the new information system there is a matrix 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 or yearly subject-specific supplementary questionnaire-based surveys, as well as various estimation procedures.

- In October 2005 the first draft of the survey forms was completed and the first communication of the changes was published on the MNB website in December 2005. The MNB also contacted interest representation bodies and chambers of the various groups of economic entities to obtain the broadest possible support for the new system. Then in January 2006 the MNB selected 30 data supplierdata suppliers to participate in a pilot project to test the system during the two years of the preparation phase.

- In June 2006, following detailed consultations with the pilot participants and relying on their feedback, data collection survey forms were finalised. Based on the feedback received, slightly differently structured survey forms were prepared for the different sectors. This decision resulted in a seemingly complicated system with several versions of survey forms, but this is how the burdens on data supplierdata suppliers could be optimised. The final decision on the frequency of reporting was also adopted at that time. The new data collection system includes monthly, quarterly and yearly questionnaires. In case of large corporations and banks, which have a major impact on the balance of payments, the monthly designation-based system assures the monthly compilation of data of sufficient quality for international requirements (European Central Bank). Data supply is based on designation in case of the monthly surveys while quarterly and yearly direct investment questionnaires are submitted based on a threshold.[117]

- In the summer of 2006, after the finalisation of survey forms, development started on the IT system in a separate sub-project. The work was performed by an IT company selected in a public procurement tender issued by the MNB, with the project management of the MNB IT function. The staff of MNB Statistics compiled the detailed specification of requirements, consulted with developers on a daily basis and set up test cases to guarantee the required outcomes.

[117] Questionnaires are described in detail in Section 2.2.3.

- The project preparing for the implementation of the new data collection system had a minisite on the MNB website with key information, with continuously updated content. This page is still available after the completion of the project to provide information to reporting entities and the general public alike.[118] A special NEWSLETTER was published on 7 occasions, informing potential data supplierdata suppliers about the new system and introducing the *electronic data reporting system* (EBEAD).

- In February 2007 the decree of the Governor of the MNB (3/ 2007) on the new BOP data provision effective as of 1 January 2008 was promulgated. The publication of the decree 10 month before its entry into force allowed enough time to data supplierdata suppliers for preparation.

- To assist in preparation, several workshops with training were organised for the various data supplier sectors, where the completion of the data collection questionnaires was explained and the use of the electronic data reporting system was demonstrated. From October 2007 the MNB allowed data suppliers to send pilot data to test the IT systems.

- In January 2008 the new data collection system was started, the EBEAD system for electronic data collection as well as the START system supporting the on-line quality control of data collection went live. At the same time, the old data collection system was shut down (Big Bang). Reporting for 2008, the first year, was allowed either on paper or electronically. From the reference year of 2009 on, MNB has accepted data only in an electronic format.

The introduction of the new data collection system has been deemed successful in international comparison as well. From the first month of 2008, we were able to meet our international data reporting obligations based on the new data, and in case of financial enterprises obliged to report monthly, the ratio of reporting entities reached 100% in four months. For non-financial enterprises, the ratio increased from 90% in the first month to 95% in half a year, and remained at that level ever since. The high response rate is outstanding in European comparison, and is the result of thorough preparation and close cooperation with data suppliers. This could not have been achieved without the commitment and significant investments of the economic entities subject to monthly, quarterly and yearly reporting obligations.

2.2.2 Compilation of the balance of payments statistics: from data receipt to publication

Structure of the new 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.

To assure full consistency between the flow data in the financial account and the international investment position we opted for a closed-model[119] observation for data collection.[120] 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 with the closing position by the required reporting attributes (e.g., by instrument, currency and foreign counterparty).

[118] The BoP minisite of the MNB is available at: http://english.fma.mnb.hu/.

[119] This reconciliation model was also applied, inter alia, by the Dutch central bank when it changed over to the new data collection system in 2003. The Dutch example showed that the use of this model simplified procedures both for data suppliers and data compilers..Before its implementation in the Netherlands in 2003, a similar model had been used by countries operating direct data collection systems: New Zealand, Australia, Ireland and Finland. The Dutch system is explained in the publication of the Dutch central bank of May 2003 entitled *Statistical Bulletin Special Issue*. http://www.dnb.nl/en/binaries/se2003m05_tcm47-147374.pdf.

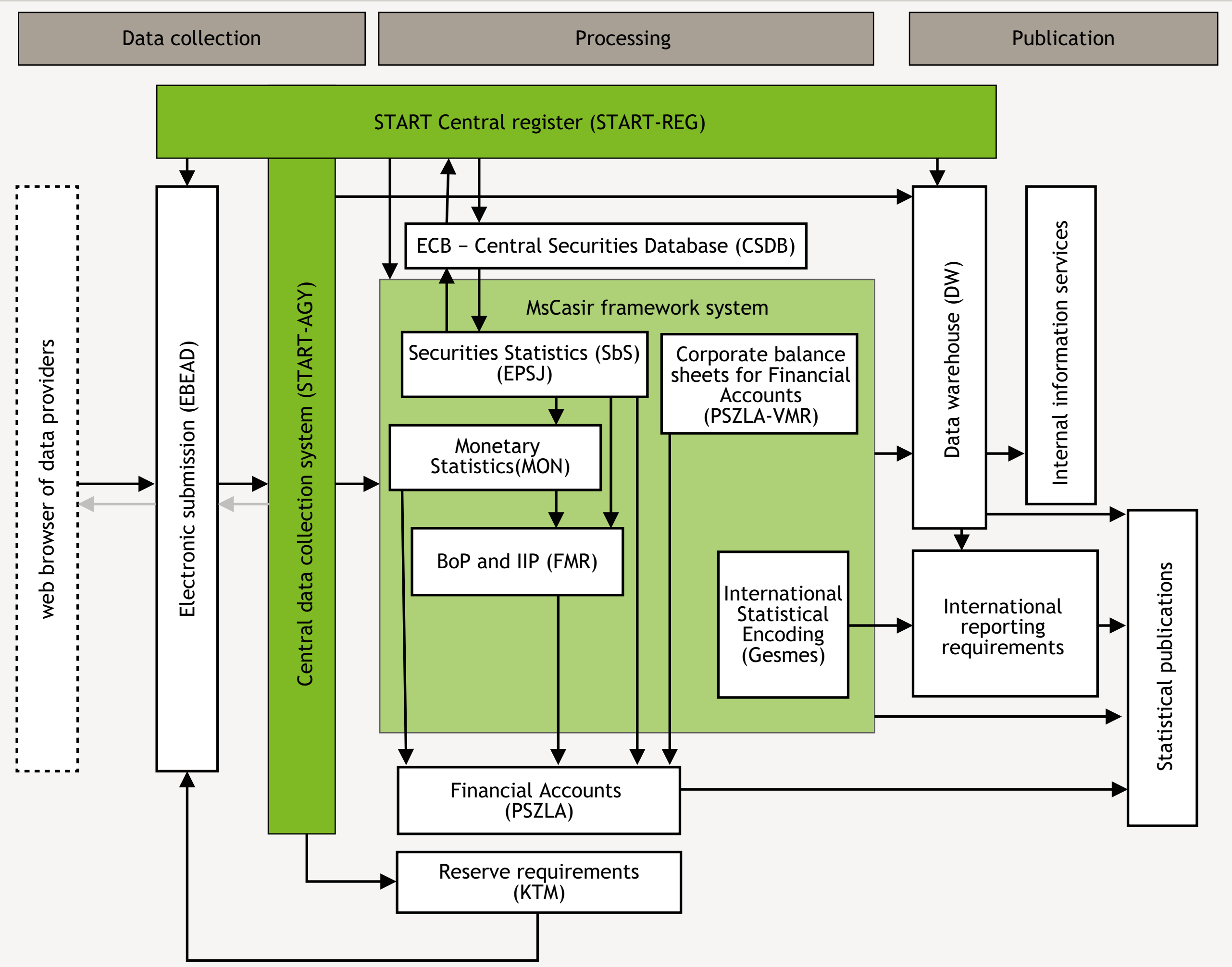
[120] Direct investment in equity capital is an exception, with only flow data required on a monthly or quarterly basis. Income and stock data are reported once a year.

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.

The primary source of information on portfolio investment is the securities statistics compiled by the MNB. Investment in the form of securities is observed and processed security-by-security. BOP data collection requires only supplementary information to help with the delimitation of direct investment and portfolio investment and on securities held by resident economic entities with non-resident custodians.

To assure the adequate quality of publications, various groups of data suppliers are required to report with different frequencies (monthly, quarterly and yearly). Thus the scope of data suppliers is specified separately for the different reporting frequencies. Monthly reporting is based on designation. Data suppliers must submit each report irrespective of whether they have any data to show for a particular instrument. The entities under quarterly reporting obligation and the yearly direct investment reporting are subject to a threshold. This means that the data suppliers themselves are to decide whether they are obliged to supply data for a given period, and to act accordingly.

Chart 19
The integrated statistical data processing system of the MNB



Electronic data receipt and on-line quality control (EBEAD and START systems)

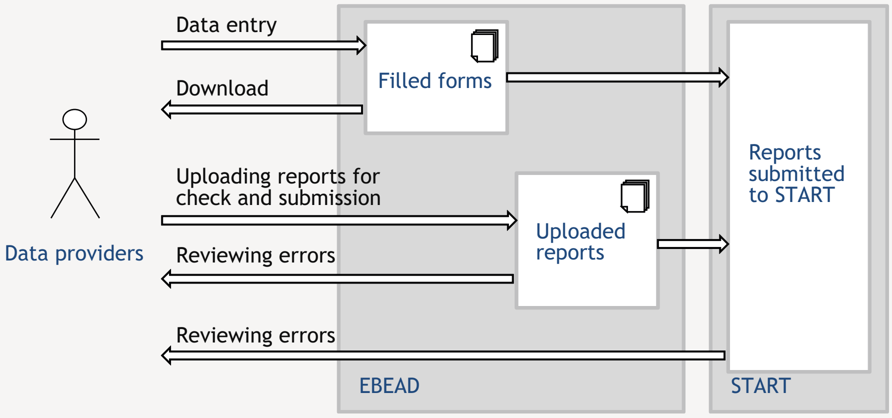
Since 2009, the MNB has accepted reporting exclusively in an electronic format. On the MNB website data suppliers may consult EBEADHelp, which provides assistance to the use of the system.

The services of the EBEAD system are available through a web-based user portal. The EBEAD system provides a 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 and the journal feature 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 correctness of the data entered.

Chart 20
Overview of the data provision process



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 the 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. 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. The START system performs further checks on the submitted reports. 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 announcement 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 report related duties or one-off tasks defined by the MNB staff. Warning times may be designated to each task. When the warning time or the deadline is over, the system sends an e-mail warning to the 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.

Balance of Payments System (FMR)

Data are processed in the FMR system. The FMR takes the data to be processed from different source systems (START, Securities processing system (EPSJ) and exchange rate calculation (ASS) system.)

The FMR converts, through a series of processing steps, the data received in different structures into a so-called "FMR" record set containing uniformly structured records. At the end of processing, the data are moved to the analytical subsystem and are incorporated in the so-called supermatrix. The supermatrix is a database that facilitates queries of past and recently processed data by time series, according to the dimensions of FMR records (e.g., country, currency, instrument, data supplier, etc.), using, among others, the OLAP cube. Data can be queried in two aggregation currencies (HUF and EUR).

Following the confirmation of processing, publications are prepared in the reporting subsystem, a separate module of the FMR. The publication tool offers a user friendly interface for this purpose and facilitates a flexible response to changing international data reporting requirements.

From data receipt to publication

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 for *monthly reporting* in the subsequent year. In this event the data supplier must submit all the monthly BOP data collected by the MNB irrespective of threshold (current transfers, direct, portfolio and other investment, financial derivatives). 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 also has its drawbacks, though: on the one hand, the MNB is unable to foresee which enterprises would have significant financial account transactions with the rest of the world in the reference year when drawing up the list of monthly reporters, and on the other hand, if an entity is designated during the year, data for the reporting period prior to designation cannot be obtained as no data provision can be required retroactively.

(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 case of failure to comply with a reporting obligation, the MNB may demand the submission of the data, in the framework of a central bank audit as defined in Section 29 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 its updating and maintenance, the MNB relies on the reported data as well as on other publicly available information.

The reference period is the calendar month for monthly reporting, calendar quarter for quarterly reporting and calendar year for yearly reports. Enterprises working with different financial years report direct investment data on the financial year ended in the reference year. e 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.

Data provision and the reported data are checked in several rounds: automatic authentication and formal checks in the electronic data receipt system (EBEAD) and additional formal, substantive and consistency checks in the START system, where the data is stored.

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. 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.

2.2.3 Description of survey forms

To replace the former data collection system based mostly on the observation of settlements, in 2008 the Magyar Nemzeti Bank, the compiler of balance of payments statistics, in cooperation with the Central Statistical Office (HCSO), introduced a new data collection system based on direct reporting relying on the following three main sources of information:

- direct reporting by economic entities with external economic relations (MNB, direct BOP data collection),
- data transferred by the Hungarian Central Statistical Office (goods, services, current transfers, compensation of employees), and
- data transfer on portfolio investments based on the securities statistics data collected by the MNB.

The new BOP data collection covers the entire balance of payments and follows its structure. In addition to data directly collected and transferred in aggregated format by the Hungarian Central Statistical Office, special data collection demanded by the MNB serves to observe direct, portfolio and other investments and their income, financial derivatives as well as some of the unrequited transfers and transactions relating to non-produced, non-financial assets.

Within each topic, more than one survey forms were designed taking into account the frequency of required reporting and the characteristics of the various groups of data suppliers (sectors/groups of sectors). Direct and other investment must be reported on survey forms tailored to the characteristics of data supplier groups (MNB, credit institutions, financial corporations, general government and, the most numerous group, other economic entities: mostly non-financial corporations, insurance corporationcompanies, non-profit institutions), while the survey forms on securities investments, financial derivatives, unrequited transfers and non-produced, non-financial assets have identical structures for every data supplier.[121]

The decree on data supply[122], issued annually, contains the data collection tables as well as the instruction for completion, general provisions concerning the supply of information and supporting technical data necessary for reporting.

The supporting technical data necessary for the supply of information is published by the MNB on its website simultaneously with the entry into force of the decree.

The tables of the various reports, complete with explanations, contain the key information relating to the columns to be filled in, but this field[123] also contains instructions for the conversion of excel tables into txt format as well as txt sample files to assist in the submission of reports through the EBEAD. On the same page the MNB publishes the rules of formal and substantive checks relating to reports and performed by the data receipt system as well as lists of codes (country, currency, instrument codes etc.). The detailed methodological supporting documents and methodological notes tailored to the various data supplier groups serve to assist with the interpretation of economic events to be reported.

Frequency of reporting

In order to optimise the availability of data, compliance with internal and external publication requirements and minimisation of the burden on data suppliers, the MNB decided to use a combination of the designation and threshold methods to determine the scope of data suppliers.

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[121] The reports by subject required by the MNB, totalling 30, are listed in the Annex.

[122] Decree of the Governor of the Magyar Nemzeti Bank on the scope of information to be supplied for the central bank information system and on the method and deadline of data supply. The decree effective as of January 2011 is available at: http://english.mnb.hu/A_jegybank/mnben_mnb_rendeletek.

[123] The BOP minisite of MNB is available at: http://english.fma.mnb.hu/.

Monthly reporting

The monthly reporting obligations always arise through specific, written designation, while the ad hoc, annual and quarterly reports may be threshold-linked or they may be mandatory for designated economic agents.

Due to the monthly reporting obligation of Hungary to the ECB, the balance of payments needs to be produced on a monthly basis. For this, the most important source is the monthly data reporting of economic entities with a significant contribution to the balance of payments (R02-R11), who must submit each monthly report required by the MNB for their sector group in the BOP field, irrespective of any threshold.

The monthly reports of the close to 800 economic entities give a comprehensive picture of their monthly transactions and stocks of their financial assets relating to non-resident counterparties as well as their transfers.

As for the data to be supplied by the HCSO, the trade in goods figures (R32) are monthly while other reports are quarterly, therefore the monthly data for these reporting areas are estimated.

Quarterly reporting

From among reports with the same data content and structure as monthly reports but pertaining to quarters and submitted quarterly (R12-R18), quarterly data suppliers must submit only those where they reach the threshold specified in the data supply decree.

During the compilation of quarterly balance of payments data, the information received in the monthly reports are supplemented by the data submitted by the approximately 1600 economic entities reporting quarterly on direct investments (R12, R13), other investments, (R15-R17), financial derivatives (R14), unrequited transfers and non-produced, non-financial assets (R18).

The data of the National Tax and Customs Administration of Hungary on the stocks and flows for claims on and liabilities to non-residents concerning VAT accounts kept in EUR (R26) supplement the data received in monthly and quarterly reports.

Monthly and quarterly data suppliers with liabilities of original maturity more than one year at the end of the quarter report the repayment schedule of such liabilities in a monthly breakdown in the report on on the maturity breakdown tailored to their sector group. There is special reporting for the following entities:

- non-financial corporations, insurance corporations and pension funds as well as non-profit institutions serving households, (R20)
- other monetary institutions, other financial intermediaries and providers of auxiliary financial services (R21); and
- the central government, local governments and social security funds (R22).

Of the data supplied by the HCSO, the reports on travel (R33), services other than travel (R34) unrequited transfers and compensation of employees (R36) are provided quarterly.

Supplementary data (R19), reports on government guarantees (R25) and debits and credits of resident, non-bank clients due to payment transactions with the rest of the world (HUF and foreign currency) (R38) serve the purpose of data verification.

There is separate data collection (R24) for the observation of loan debt of the state and that with state guarantee. The report of the Hungarian State Treasury on government sureties (R25) is also used for verification purposes. Supplementary balance sheet data (R19) help in the verification of figures reported on direct and other investment, and from 2012 on two additional tables will provide information on the transactions of resident entities with VAT registration in Hungary and abroad.

Yearly reporting

In case of the annual data supply supplementing quarterly data on investment in property (R27), direct investment (R29), early repayments (R39) and special liabilities data to be supplied to the World Bank (R28), annual frequency is justified by the availability of data and it is facilitated by the timelines for international reporting.

The number of data supplierrespondents using the annual direct investment survey (R29) declined from 4000 to 3000 following the increase of the threshold in 2010. These questionnaires contain data after the end of the financial year that are not available during the year. Data on the stock of direct investment in equity capital is reported only once a year based on the annual reports.

The annual data supply on the stocks and flows of the long-term debt of the state, of economic organisations in majority state ownership, as well as of economic organisations in which the state does not have majority participation but have long-term state guaranteed debt to non-residents (R28) is the data source for World Bank reporting.

Deducting early repayments on loans with original maturity of more than one year (R39) from the total repayments made during the year yields the repayments relating to the reference year for the debt service data.

Ad-hoc information

Ad hoc data supply for registry purposes (R01) is required on the registry data of non-resident counterparties to direct investments. This is because the transactions to be included in the monthly, quarterly and yearly reports on direct investments must be supplied by partners, which are identified by partner identification codes. The particulars of the counterparty and the partner identifier code are supplied by the data supplier (based on its own records) in the ad hoc report for registry purposes (when information is supplied for the first time and subsequently if there is a change in data).

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 (R10), 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 in light 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 technical information for the reporters on the website.

The data must be reported in a closed model(except for equity capital, that is, the closing position must be identical with 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 with the closing position reported in the previous period.

Depending on the instrument, the 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 numbers; the following cases are exceptions:

- annual data provision 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),
- supplementary balance sheet data of non-financial corporations (R19), and
- the quarterly report on debits and credits of resident, non-bank counterparties due to payment transactions with the rest of the world (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.

The data received are converted to HUF and EUR by the data processing system but the original currency is also stored. The conversion of data is at the mid rate of the end of the previous and reference months for opening and closing positions and for the monthly average mid rate for changes during the period.

Topics of data collection

A. Direct investment
B. Investment in securities
C. Financial derivatives
D. Other investment
E. Trade in goods, travel and services other than travel, compensation of employees
F. Unrequited transfers and non-produced non-financial assets
G. Supplementary balance sheet data
H. Registry data

A. Direct investment

Direct investment is observed through ad hoc (R01), monthly (R02, R03), quarterly (R12, R13) and yearly R29) reports, disclosed by non-resident counterparty.

The ad hoc reports contain the registry data of non-resident counterparties (within the same company group), which facilitates the breakdown of the reported data by country and sector. This must be submitted before the first monthly, quarterly or yearly reports are sent and also if the particulars of the non-resident change.

There may be no overlap between the monthly and quarterly data suppliers, whereas the yearly report is mandatory for monthly and quarterly data suppliers as well as for other economic entities exceeding the thresholds set out in the MNB decree on data supply.

Monthly and quarterly reports of identical structures are designed separately for financial enterprises (other monetary institutions, other financial intermediaries and auxiliary financial services) and for other economic agents. The report to be submitted by financial enterprises consists of 12 tables, others need to complete 20 tables.

The report of both data supplier groups contains the following:

- changes in equity investment during the period (equity investment, withdrawal of equity)
- changes of reverse investment in respect of non-resident investors or investments during the period,
- stock of equity securities,
- stocks and flows of assets and liabilities relating to dividends (dividend declared but not paid) acquisition and sale of real property abroad.

Non-financial-institution data suppliers have 10 tables to record the stock of assets and liabilities and changes in the reference period of other capital flows with non-resident investors, investments, branches or other non-resident group members attributable to

- loans
- current or cash-pool accounts
- trade credits
- debt securities
- other assets and liabilities
- receivables and payables due to timing difference between the registration and settlement of subscribed capital increase or decrease

as well as the related interest accruals and payments.

Financial enterprises record such assets and liabilities in their reporting on other investment similarly to other non-resident partners, by countries.

The yearly report consisting of 8 tables contains equity, annual profit and other supplementary information on the data supplier and its non-resident subsidiaries.

B. Investment in securities

The monthly report of uniform structure consisting of 3 tables (R04) serves to supplement data generated from reports of resident custodians to the securities statistics system, containing

- stock of securities issued by residents and non-residents held by the data supplier and in custody abroad,
- total stock of securities issued by the data supplier, and of this, the stock of securities held by the data supplier and in custody abroad, and
- attributes of securities without an ISIN code.

C. Financial derivatives

In the asset and liability tables of the identically structured monthly (R05) and quarterly (R14) reports, financial derivative contracts on own account with non-resident counterparties within and without the company group are to be reported. The flow and stock data of assets or liabilities recorded at market value of the swap, option, futures, forward and other derivative contracts marked-to-market by deals must be reported converted into HUF.

D. Other investment

Other investment is observed in monthly (R06-R09), quarterly (R15-R17) and yearly (R39) reports. Monthly and quarterly reports with identical structures are applicable for the following groups of data suppliers:

- non-financial corporations, insurance corporations and pension funds as well as non-profit institutions serving households, (R06/R15)

• other monetary institutions (R07, R10/R16)
• other financial intermediaries and providers of auxiliary financial services (R08/R17).

No overlap is allowed between monthly and quarterly data suppliers in respect of this report.

The central government, local governments and social security funds are required to report only monthly (R09), with the exception of quarterly reports of the Hungary State Treasury for control purposes (R25) and the data of the National Tax and Customs Administration of Hungary on the stocks and flows of claims on and liabilities to non-residents concerning VAT accounts in EUR (R26).

The reports of non-financial corporations, insurance corporations and pension funds as well as non-profit institutions serving households contain the stocks of assets and liabilities vis-à-vis non-resident partners outside the company group arising from

• loans
• deposits,
• current accounts,
• trade credits,
• other items

as well as their changes in the reference period and the related interest accruals and interest payments by country, currency, original maturity and other identifiers.

E. Trade in goods, travel, services other than travel and compensation of employees

Reports on trade in goods (R32), travel (R33), services other than travel (R34) and compensation of employees (R36) are supplied by the HCSO to the MNB based on the data they collect; the first of these reports is provided monthly, the others quarterly. The contents and structure of the reports are based on the balance of payments methodology, in the required breakdown. In the case of trade in goods, this means the various types of transactions (primarily the differentiation between goods for processing and other transactions), while for travel and non-travel services, the categories defined in the methodology.[124]

Reports are in HUF, broken down by partner country; no currency split is required in these cases.

F. Unrequited transfers and non-produced non-financial assets

The monthly (R11) and quarterly (R18) reports contain the unrequited current and capital transfers in the reference period to non-residents by the data supplier or to the data supplier by non-residents, as well as their reimbursement and the acquisition from or sale to non-residents of non-produced, non-financial assets.

G. Supplementary balance sheet data

Supplementary balance sheet data to be provided in the quarterly reports (R19) of non-financial corporations:

• receivables (buyers)
• payables (suppliers)
• components of equity capital and
• interim profit

facilitating the verification of data in the direct investment and other investment reports.

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[124] See the relevant parts of Section 2.1.2.

The data in the two new tables to be introduced in 2012 on the trade in goods with VAT registrations in Hungary and abroad serve to improve the accuracy of goods trade data.

H. Registry data

- The R01 report supplied on an ad hoc basis contains the registry data of foreign counterparties included under direct investments.
- The quarterly R24 report shows the terms and conditions of long term liabilities of, or guaranteed by, the government.
- The quarterly report on debits and credits of resident, non-bank counterparties due to payment transactions with the rest of the world (HUF and foreign currency) (R38) serves purposes of the verification of the scope of data suppliers. The mandants of credits to the various resident economic entities and the beneficiaries of debits in cross-border payment transactions are predominantly non-residents, generally with underlying economic events giving rise to balance of payments reporting obligations.

2.3 RELEASE AND REVISION OF BALANCE OF PAYMENTS STATISTICS

2.3.1 Release calendar

The release calendar for the balance of payments 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 looking ahead.[125]

The MNB compiles its BOP releases in HUF and in EUR.

Monthly releases

Only 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[126], the final data on the details of international reserves and foreign currency liquidity are disclosed.

Quarterly release

The MNB releases the quarterly balance of payments and international investment position on the last working day of the quarter following the reference quarter. The data in the balance of payments statistics is explained in the press release and detailed standard tables published on the website. The web site separately shows data with and without special purpose entities both in HUF and in EUR.

- Without special purpose entities
  - Key figures in quarterly breakdown (yearly data)
  - BOP and IIP data in quarterly breakdown (yearly data)
  - Time series of data since 1995, in a quarterly breakdown
    - Key figures
    - BOP and IIP data
    - Seasonally adjusted figures since 1995
    - Charts
  - Hungary's long-term debt by original maturity and by sector

[125] The release calendar is available from: http://english.mnb.hu/Statisztika/calendar_of_statistical_releases.

[126] Hungary joined the so-called Special Data Dissemination Standards established by the International Monetary Fund (IMF). On the SDDS, see Footnote 40. The Hungarian SDDS web page is available at http://dsbb.imf.org/Pages/SDDS/CtyCtgList.aspx?ctycode=HUN.

• With special purpose entities (from 2006)
  – Key figures
  – BOP and IIP data, quarterly

As there is permanent and keen user interest in the various statistics detailing direct investment (by country and sector), the MNB operates a separate minisite where the quarterly flow and stock data on direct investment is disclosed by component, together with the quarterly country and sectoral breakdown of transactions including and excluding SPEs.[127]

Annual releases

In line with the processing of yearly reporting on direct investment, annual data are first released at the end of the 9th month following the reference year (30 September). 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 available already 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 available at that time.

For the purposes of direct investment statistics, the September release is of outstanding importance as this is when the reported equity income and position figures replace the estimates in the statistics published for the periods of the reference year (the calendar year preceding the year of release). The detailed breakdown of positions by country and activity is published in the 15th month after the end of the reference year.

Thus annual data are available at the end of the 9th month following the end of the reference year (September), while data on the stock of direct investment by country and activity are disclosed at the end of the 15th month after the reference year (March). On the website, annual statistics are displayed in separate tables both on the

• *Balance of Payments, International Investment Position* page:
  – Balance of Payments, International Investment Position, annual breakdown from 1995 excluding SPEs,
  – Selected debt service indicators (excluding SPEs) (preliminary data are generated, based on the data of the four quarters, at the end of the first quarter following the reference year),

and on the

• *Foreign direct investment* page:
  – Components of stocks by country and activity (excluding and including special purpose entities)
  – Reinvested earnings by country and activity (excluding and including special purpose entities)
  – The tables of the direct investment publication (excluding and including special purpose entities) contain, in a single file, the time series, country and activity breakdowns of flows and stocks.

2.3.2 Timeline and content of international reporting

In addition to publishing balance of payments and international investment position figures on its website, the MNB also prepares international reports to the ECB, Eurostat, BIS, OECD, IMF, World Bank and UNCTAD. These international organisations use the data collected from member countries to compile analyses and publications. The publications are available from their websites or the printed versions can be purchased. In its database, each international organisation makes available the data of member countries. These databases also show data for Hungary in international comparison. European organisations set out in legislation the international reporting obligations of Member States.

[127] The page is available at: http://english.mnb.hu/Statisztika/data-and-information/mnben_statisztikai_idosorok/mnben_elv_external_trade/mnben_kozetlen_tokebef.

Monthly reporting

- The monthly balance of payments aggregates must be reported to the ECB by the 30th working day following the reference month.
- The international reserves and exchange rate figures (USD exchange rate) are sent to the IMF on the 7th day after the reference month.
- Selected international reserve data are reported to the BIS on the second week after the reference month.
- Detailed data on international reserves and foreign currency liquidity are sent to the ECB and the IMF on the 18th day after the reference month.

Quarterly reporting

- Balance of payments and IPP data by country must be sent to the ECB on the 90th day after the end of the quarter.
- Selected balance of payments aggregates are sent to Eurostat by the 60th day after the reference quarter, and balance of payments by country by the 90th day after the end of the reference quarter.
- Selected balance of payments aggregates are reported to the BIS on the week after the reference quarter.
- Balance of payments and IPP data are sent to the IMF by the middle of the month following the reference quarter.
- Data on the currency structure of the international reserve are reported to the IMF by the end of the month following the reference quarter.
- Registry data on the long term debt of, or guaranteed by, the government must be reported to the World Bank by the 30th day after the reference quarter.
- Data on foreign debt are reported to the World Bank by the end of the month following the reference quarter.

Yearly reporting

- For the Eurostat, annual data, by country, on trade in services and on income, flows and stocks relating to direct investment is reported in the 9th month after the reference year and annual data by activity on direct investment is supplied by the 21st month after the reference year.
- For the OECD, direct investment aggregates are sent for its publication *FDI trends and developments* together with the country and activity breakdowns of income, flows and stocks relating to direct investment. The timing of the report is adjusted to the date of the publication.
- For the UNCTAD, we report direct investment aggregates for their publication *World Investment Report*. Again, the timing of the report is adjusted to the date of the publication.
- The specific flow, stock and maturity data on the long term debt of, or guaranteed by, the government as well as the aggregated flow, stock and maturity data of the debt of the private sector by type of lender must be reported to the World Bank by the third month after the reference year.

2.3.3 Revision policy

For the revision policy of the balance of payments statistics it is necessary to review the typical frequency of the change in the data of the data suppliers reported to the MNB and the retroactive timeframe of such changes. If data sources are subject to regular revision, this must be reflected in the balance of payments statistics as well.

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.

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

Period			Dissemination		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	T	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 = the year before the refrence year; TQ1 = Q1 of the reference year; TQ1–Q4 = the quarters of the reference year
(2) In the yearly column: (2) = the second dissemination (and first revision); (5) = fifth, final dissemination
*(3) * = the first dissemination of the country- and activity breakdown of the stocks of Foreign Direct Investment*
(4) Shaded area: from the first to the final dissemination

- Data on travel remain unchanged. In respect of a period, a single questionnaire survey is conducted.

- For the 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 takes such revisions into account in its publications in March and September.

- Data for the compensation of employees and the related transfers are revised retrospectively for three years, i.e., data become final in the 11th quarter following the current year.

- The MNB publishes the data produced from the annual questionnaires first after the 3rd quarter following the reference year. In this publication, the data on the direct investments of non-residents in Hungary are extrapolated using the data from the corporate income tax return (TÁSA) database. Because of the time requirement of the checks performed, the stock figures by country and activity are first published at the end of the 5th quarter after the reference year (31 March) and the first revision of the annual data is also published at that time. The second revision of the annual data occurs after the receipt of the next annual reports (7th quarter after the reference year if data suppliers implement retroactive adjustments 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 extrapolated part also changes. The figures of data suppliers using different financial years[128] 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"[129].

[128] If the financial year and calendar year are different.
[129] In June, only the four quarterly data sets are available for the previous year, on which no annual data had been released, while in December only the first and second quarter data are available.

Under the new methodology we will publish data first in June 2014 on Q1 and annual data in September 2014 on the reference year of 2013.

2.4 HARMONISATION WITH FINANCIAL AND NON-FINANCIAL ACCOUNTS

2.4.1 Balance of payments statistics vs. financial accounts

The harmonisation of the balance of payments and the financial accounts is discussed in detail in the MNB publication *Financial Accounts of Hungary 2008*. Relying on that document, here we review the recent developments and the current status of harmonisation. As the MNB is responsible for the compilation of both statistics, consultations on the harmonisation of the balance of payments and the financial accounts are held primarily within the MNB. This does not mean that consistency depends exclusively on circumstances within the MNB (e.g., due to international methodologies or different data sources).

It is expedient to compare the *consolidated resident sector of the financial accounts* with the balance of payments statistics as the two sets of statistics have identical perspectives (looking from the resident economy to the rest of the world).[130] The receivables recorded in the balance of payments statistics are comparable to the financial assets in the financial accounts, and payables to liabilities.

It is possible to group instruments between the two statistics to render both stock and flow data comparable. The classification below can be performed on the level of the published data as well:

Table 6
Comparable classification of the balance of payments and the financial accounts

	Balance of payments	Financial accounts
1.	Portfolio investment bonds and notes + bonds in the international reserve	Long term securities
2.	Portfolio investment money market instruments + money market instruments in the international reserves	Short term securities
3.	Financial derivatives	Financial derivatives
4.	Equity capital under direct investment and portfolio investments	Equity capital
5.	Other: Direct investment, other capital + Other investment + Other assets within international reserves	Other: Monetary gold and SDR, Currency and deposits, Loans, Insurance reserves, Other assets and liabilities

Comparison in the above classification shows that the theoretically identical categories of the two sets of statistics used to contain substantial differences. The past differences were attributable mostly to methodological reasons. Harmonisation of macroeconomic statistics is also an important objective in international methodological guides. Accordingly, in practice several methodological revisions have been performed on balance of payments statistics and financial account statistics in the past decades; these reduced differences between the two sets of statistics as well as assuring compliance with international methodologies. In the past, the two statistics used different data sources to compile their data; this arrangement has been replaced by shared data use. Under the harmonisation process implemented in several stages, discrepancies were reduced to the minimum by 2010.

- One of the first steps in harmonisation was the introduction of direct questionnaire-based surveys to supplement the cash flow data in the balance of payments statistics in the late nineties, then the take-over of accrual-based goods and services data from the HCSO and the adoption of accrual-based income accounting in 2003–2004. Thus the discrepancy between the income and financial accounts of the national accounts and the balance of payments statistics due to the non-recording of reinvested earnings was eliminated. The stock figures previously obtained by summing up transactions were replaced by stock data recorded based on corporate reports. In the case of stocks, data revision was due to the

[130] This solves the problem that there is no external liability as a counterpart to our SDR and monetary gold assets, that is, on the rest of the world account of the financial accounts we find no comparable mirror values to these claims in the form of liabilities of the rest of the world.

inclusion of reinvested earnings as well as the change in the data source. The comparable methodology was backcasted until 1995. **Interest type income** on financial assets is now also recorded on an accrual basis instead of the former recording of actual payments. In contrast, in the balance of payments statistics the stock data for **other equity** in portfolio investments **continued to be produced by cumulating transaction data** up to 2007. These notional stocks were gradually replaced in the financial account statistics by stock figures obtained from other sources (accounting statements, securities statistics reports). In addition, in the financial account statistics the stock data occasionally differed from the book value to approximate the market value. This discrepancy is still present in the time series. The discrepancies are most marked on the debit side.

- The introduction of the new data collection system for the balance of payments in 2008 was a major move towards harmonisation. In the framework of this, the shared use of securities statistics as data sources and of the flows and stocks directly reported by data suppliers was introduced. However, differences still prevail in all the above areas in respect of pre-2008 data.

- In September 2009, with the elimination of deviations relating to EU transfers, the balance of payments and financial accounts converged to a uniform methodology both in terms of stocks and flows, retroactively to 2004.

- In the publications of September 2010, balance of payments and the financial accounts started to use identical data also for trade credits and dividends payable retroactively to 2004. By 2008, the new data collection system had resolved the issue of harmonization in these areas, thus harmonisation was necessary mostly in respect of historic data.

- In the course of 2010 we also eliminated the discrepancies arising from the use of different prices for securities transactions.

Irrespective of the harmonisation measures, the balance of payments is only one of the data sources of the financial accounts: other sources are also needed in respect of domestic sectors. In case of transactions or stock changes affecting two sectors simultaneously, financial accounts use a single data source for both sectors to prevent any statistical discrepancy between the sectors. However, particularly in cases involving the general government, the priority for financial accounts is to be consistent with general government statistics and with the non-financial accounts; in such instances, there may still be differences to the balance of payments.

Furthermore, differences due to classification remain until the introduction of the new methodological standards; examples include equity participations of international organisations, which are included, in accordance with the effective methodology, among other investment other items in the balance of payments while they are under equity capital in the financial accounts. Investment in debt securities between parties in direct investment relationship is recorded under direct investment in the balance of payments statistics and under securities in the financial account statistics. Upon the introduction of the new methodology, these classification discrepancies will disappear: debt securities will be disclosed in a separate line in the balance of payments.

2.4.2 Balance of payments statistics vs. non-financial accounts

The harmonisation of the balance of payments and the financial accounts requires close cooperation between the MNB and the HCSO.

Apart from differences in presentation, the effective BPM5 and the SNA 1993 do not cause any substantive discrepancy between the international methodologies of the balance of payments and the system of national accounts in terms of core methodological principles, the content of underlying categories and the accounting rules.[131] In addition to the different perspectives (rest of the world vs. Hungary), additional differences in presentation between the two statistics stem from the fact that the balance of payments classifies financial instruments primarily into functional categories while the national accounts use a breakdown by instrument. However, bridges may be created to derive from the BOP and IIP the relevant national accounts transactions and positions.

[131] Cf. Section 1.4. on this subject.

Table 7
Correlation of the rest of the world sector accounts and the subaccounts of the balance of payments

Rest of the world account	Balance of payments
Goods and services	Goods and services (current account)
Primary income and current transfers	Income and current transfers (current account)
Capital account	Capital account
Financial account	Financial account

National practice in Hungary

In Hungary, the non-financial accounts of the rest of the world sector are compiled by the Hungarian Central Statistical Office, while the preparation of the balance of payments statistics is the responsibility of the Magyar Nemzeti Bank.

In recent years, there have been intensive consultations to minimise the discrepancies between the balance of payments and the rest of the world sector account; as a result, the situation is quite favourable in international comparison as well. According to a survey prepared by the EUROSTAT[132] in 2009, in terms of net lending/net borrowing, Hungary is in the top third of Member States. The report reveals that in the 1999–2007 interval in Hungary, due to the different data sources and procedures, notable differences were found mainly in the area of transfers and the capital account.

The cooperation that emerged between the central bank and the statistical office (maintenance of the reporting registers, data exchange, joint solutions for methodological problems, etc.) and the division of labour (the central bank takes over a number of statistical data on BOP instruments collected by the HCSO, including goods (from 2003); business services and travel (from 2004); other services (from 2005); compensation of employees, EU and household transfers (from 2008)) have promoted the progress of harmonisation on the level of data.

Since the survey, the harmonisation of the data of the statistics compiled by the Magyar Nemzeti Bank and the Central Statistical Office has made even more progress, encompassing items that used to be significantly different.

In September 2009, the treatment of transfers from the European Union was changed in the balance of payments, adopting the methodology applied in the national accounts. This, on the one hand, meant the adoption of accrual based accounting in the balance of payments statistics, that is, transfers are recorded as unrequited (current or capital) transfers at the time they are used, and on the other hand, under the approach harmonised with the national accounts, transfers from the EU are recorded directly as the revenue of the final beneficiary, which also brought the two sets of statistics closer on the level of the resident sectors.[133]

At the end of 2010, with a view to avoiding duplications, the two institutions that compile statistics agreed which of them would have exclusive responsibility for the collection of data on the various transfer categories. Accordingly, data on social contributions, taxes on products and taxes on production would be compiled by the HCSO. The same applies to revenues from taxes on income and wealth, while expenditures are the responsibility of the Magyar Nemzeti Bank. This move will eliminate even minor discrepancies in these instruments. The next step will be the removal of discrepancies between the capital accounts in the BOP and the national accounts, so that the HCSO takes over the data collected by the MNB from economic entities with external economic relations.

Under the new BPM6 methodology to be implemented in 2014, the balance of payments and the Rest of the world account will be fully harmonized.

[132] The EUROSTAT CMFB, *Committee on Monetary, Financial and Balance of Payments Statistics*, a consultative body set up by the European Commission in 1991, with the ultimate objective of assuring close cooperation in the statistical fields indicated in its name between central banks and statistical offices, and between Member States and the Commission.

[133] For more details, see Section 2.1.3.5.

At present, the Goods and services section of the Rest of the world account contains illegal goods and activities, while these are not present in the balance of payments. Financial Intermediation Services Indirectly Measured (FISIM) are recorded under the Rest of the world in services, while in the balance of payments they are disclosed under investment income. However, the introduction of the new balance of payments methodology will eliminate these remaining differences.

2.5 TREATMENT OF THE BREAK IN SERIES DUE TO THE INTRODUCTION OF THE NEW DATA COLLECTION SYSTEM

A break in series may occur in statistical data if there is a change in its content or in the scope of data sources necessary for its production or in both. Considering that breaks in series may present a significant issue when analysing data, the compilers of statistics must pay special attention to identify and address breaks in series and to inform users.

The new data collection system for BOP and IIP data in 2008 was introduced, inter alia, to assure the availability of better quality data in compliance with the methodological standards (BPM5). The implementation of the new system caused breaks mainly in the stock data of those instruments for which only stock data generated from transactions, rather than reported, had been available before 2008. This applied primarily to the various loan and deposit stocks of economic agents classified in other sectors, as there had been reported stock data for equity within direct investment previously as well. For most instruments, the data source of flow data has also changed nevertheless, as prior to 2008 in theory there was a comprehensive system of observation for transactions, no major break in series is to be expected in most cases, at least in respect of the totals for the whole economy.

When the data collection system was changed, there were proposals to also make progress in terms of the methodology applied. This represented a change primarily in the treatment of groups of enterprises, notably that credit relationships of residents with non-resident enterprises in the same broader group of companies (fellow undertakings), and not only with undertakings in direct ownership relationship, are recorded under direct investment. This has necessitated a significant reclassification of loans compared to the previous treatment, thus, in respect of other capital within direct investment, and other investment on its own, there would have been a break in the time series of stocks and flows in 2008 even if the data collection system had remained unchanged.

In case of certain instruments among loans, the introduction of the new data collection system resulted in the reporting of hitherto non-existent data both for stocks and flows. First and foremost this affected the treatment of trade credits, where there had been effectively no direct data sources before 2008 as in the closed system of cash flow reports the data suppliers reported the in-cash transactions relating to goods and services rather than their related claims and liabilities. Considering, however, that since 2003 the source of the published data has been the goods and services figures compiled by the HCSO rather than the cash flow reports, a certain part of the discrepancy between the two time series had to be recorded under trade credits, more precisely among other investment, on a net basis, in the absence of any additional information. Thus the trade credit reports received in the new system caused significant breaks in series not only for stocks but also for flow data because the data source itself contained gross – i.e., including both claims and liabilities – rather than net data. Furthermore, from 2008 on intercompany trade credit claims and liabilities have also been included in direct investment.

Another instance of the break in series was in dividend related liabilities. Considering that the methodological changeover introduced parallel with the new data collection process did not affect the treatment of dividends and of stocks and flows relating to equity in general, and the new data collection process brought no fundamental change in this respect, the break in series in this field also deserved special attention. In this case, a break in series was caused by the reported data, more particularly by the fact that in the pre-2008 data collection system, in the absence of stock data, it was not always possible to track what happened to dividends declared but as yet unpaid.

There were no appropriate analogies available from past experience for the treatment of breaks in series, though substantial changes had been introduced to the data collection procedures in 2003 and 2004 as well (and to a minor extent also in 2005). On the first occasion, the trade in goods data of the HCSO were incorporated into the balance of payments, while on the second occasion the recording of reinvested earnings was introduced (that is, the treatment of trade credits and dividend related transactions were changed substantively). Both changes had major effects on the flow time series, therefore time series had to be revised retrospectively for several years upon the implementation of the change. However, unlike in 2008, data sources necessary for the revision had been available both in 2003 and in 2004. As this was not the case at the time of the changeover in 2008, it took time to collect the information necessary to address the breaks in series.

In the case of trade credits and dividends payable, as the first step, the behaviour characteristics of flows after 2008 were observed and the new data sources were stabilised. In the course of the retroactive estimation of trade credits we had to consider that the movement of assets and liabilities had to be monitored separately, while for dividends payable, with the help of the new data series, we had to map the timing of the payment of declared dividends and the future of the dividend payable generated in this manner to find out how justified the related break in series is.

Relying on the information collected, in September 2010 a significant retroactive data revision was performed in respect of trade credits and dividends payable, harmonized with the financial accounts statistics. In the case of trade credits, pre-2008 time series were revised to take into account the methodological change of 2008 concerning other capital within direct investment, that is, we continue to record trade credit only under other investment, but both under assets and liabilities. In other words, the elimination of the break in series affected only the totals of the trade credit assets and liabilities and not the results of the methodological change, thus we proceeded similarly to the treatment of other loans. The time series were backcasted in the balance of payments until 2004 in both cases, mostly for practical (technical) reasons. This arrangement "moved" the break in series caused by the new data collection system from 2008 to 2004, assuring the homogeneousness of time series for recent periods. This step was also a major move towards the harmonisation of the balance of payments and the financial accounts.[134]

[134] For the detailed discussion of harmonisation with the financial accounts, see Section 2.4.1.

Annex

Data collection for the compilation of the balance of payments statistics by subject area[135]

Capital investment

Identification code	Description	Frequency	Reporting deadline
R01	Registry information on non-resident partners involved in capital investments	Ad hoc when report No. 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.
R02	Monthly report on capital investments – non-financial corporations, insurance corporations, pension funds, central government, local governments, social security funds and non-profit institutions serving households	based on designation, monthly	10th working day of the month following the reference period
R03	Monthly report on capital investments – other monetary institutions, other financial intermediaries and providers of auxiliary financial services	based on designation, monthly	10th working day of the month following the reference period
R12	Quarterly report on capital investments – non-financial corporations, insurance corporations, pension funds, central government, local governments, social security funds and non-profit institutions serving households	quarterly	12th working day of the month following the reference period
R13	Quarterly report on capital 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 capital investments	yearly	30 June of the year following the reference period

Investment in securities

Identification code	Description	Frequency	Reporting deadline
R04	Investment in securities	based on designation, monthly	10th working day of the month following the reference period

[135] Pursuant to the MNB decree No. 19/2010. (XII. 10.) of the Governor of the Magyar Nemzeti Bank on the scope of information to be supplied for the Central Bank's information system and on the method and deadline of data supply, with the exception of data received from the HCSO, where the legal basis of the data exchange is the OSAP.

Financial derivatives

Identification code	Description	Frequency	Reporting deadline
R05	Monthly report on financial derivatives	based on designation, 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

Other investment

Identification code	Description	Frequency	Reporting deadline
R06	Monthly report on other investment – non-financial corporations, insurance corporations and pension funds as well as non-profit institutions serving households	based on designation, monthly	10th working day of the month following the reference period
R07	Monthly report on other investment – other monetary institutions	based on designation, 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	based on designation, 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	based on designation, monthly	10th working day of the month following the reference period
R10	Syndicated loans	based on designation, monthly	10th working day of the month following the reference period
R15	Quarterly report on other investment – non-financial corporations, insurance corporations and pension funds as well as non-profit institutions serving households. Quarterly report on financial derivatives	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 – non-financial 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	10th working day of the February following the reference period
R39	Early repayments on loans with original maturity of more than one year	yearly	10th working day of the February following the reference period

Unrequited transfers and non-produced, non-financial assets

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

Supplementary balance sheet data

Identification code	Description	Frequency	Reporting deadline
R19	Supplementary balance sheet data of non-financial corporations	based on designation, quarterly	30th day of the month following the reference period

Registry data

Identification code	Description	Frequency	Reporting deadline
R01	Registry information on non-resident partners involved in capital investments	based on designation, quarterly, Ad hoc when report No. 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 re-ports R02, R03, R12 or R13, the 9th working day after the month fol-lowing the refer-ence 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 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 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

Reports received from the HCSO

Identification code	Description	Frequency	Reporting deadline
R32	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
R34	Trade in services between resident and non-resident units	quarterly	60th day after the reference period
R35	EU transfers recorded in the national accounts during the month	monthly	38th day after the reference period
R36	Unrequited current and capital transfers, compensation of employees between resident and non-resident units	quarterly	60th day after the reference period
R37	Direct investment in Hungary, report on the TÁSA part "only"	yearly	31 August following the reference year

Useful links

Press releases of MNB on balance of payments statistics
http://english.mnb.hu/Statisztika/data-and-information/mnben_statkozlemeny

time series
http://english.mnb.hu/Statisztika/data-and-information/mnben_statisztikai_idosorok/mnben_elv_external_trade/mnben_fizm_20090330

methodological notes
http://english.mnb.hu/Statisztika/data-and-information/mnben_modszertanok

Direct investment statistics in Hungary 1995–2005, MNB April 2007
http://english.mnb.hu/Root/Dokumentumtar/ENMNB/Kiadvanyok/mnben_statisztikai_kiadvanyok/mukt_en.pdf

European Union balance of payments/international investment position statistical methods, ECB May 2007
http://www.ecb.int/pub/pdf/other/bop_052007en.pdf

IMF: Balance of Payments: Selected Publications
http://www.imf.org/external/np/sta/bop/biblio.htm

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

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

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

Balance of Payments Compilation Guide, IMF 1995
http://www.imf.org/external/np/sta/bop/BOPcg.pdf

External Debt Statistics: Guide for Compilers and Users, IMF 2003
http://www.imf.org/external/np/sta/ed/guide.htm

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

BPM6
http://www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf

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

– BPM5 revision: http://www.imf.org/external/np/sta/bop/bopman5.htm

a) DITEG: http://www.imf.org/external/np/sta/bop/diteg.htm

b) CUTEG: http://www.imf.org/external/np/sta/bop/cuteg.htm

c) BOPTEG: http://www.imf.org/external/np/sta/bop/bopteg.htm

d) RESTEG: http://www.imf.org/external/np/sta/bop/resteg.htm

e) Annotated Outline: http://www.imf.org/external/np/sta/bop/pdf/ao.pdf

– BPM6 conversion matrix http://www.imf.org/external/pubs/ft/bop/2007/pdf/matrix.pdf

IMF on-line database
http://elibrary-data.imf.org/

SNA 2008
http://unstats.un.org/unsd/nationalaccount/sna2008.asp

SNA 2003 revision
http://unstats.un.org/unsd/nationalaccount/snaUpdate.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/dataoecd/10/16/2090148.pdf

World Bank Quarterly External Debt Service database
http://databank.worldbank.org/ddp/home.do

Eurostat database
http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database

ECB 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/

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 Eden has been compiled from the given transactions in point I.1. and terms in II.1. The official currency of Eden is farthing, statistics are compiled in it. 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 Eden with non-residents

1. Enterprises in Eden exported cars. The 10,239 million crowns received in consideration of the exports was credited on the foreign nostros account of the resident account keeping commercial banks.

2. During the year, 35,609 million farthings were spent on food imports, which was paid from the foreign nostro account of the domestic account keeping banks in the value of 11,599 million crowns.

3. Relating to the imports of goods, 3849 million crowns, the equivalent of 11,432 million farthings, were debited on the foreign nostro accounts of resident account keeping banks as payment for the services on non-resident transportation companies.

4. In Eden, tourists from Hell exchanged and spent 4333 million crowns during their stay.

5. The government of Eden sent pharmaceutical aid worth 318 million farthings to Hell, afflicted by a natural disaster.

6. Guest workers from Eden 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 Eden raised 1300 million crowns during the year.

8. The 100% non-resident-owned direct investments in Eden had 4000 million farthings of after-tax profits in the reference year.

9. Dividends of 2709 million farthings were declared and remitted to their home countries by non-resident direct investors.

10. On portfolio investments, Eden recorded interest income of 1067 million crowns.

11. The government of Eden issued bonds, of which non-residents subscribed 100 million farthings.

12. The government privatized 49% of the Post Office, the non-resident investor paid 1500 million crowns for the participation.

13. Enterprises resident in Eden also raised funds from abroad in the form of share issues, in the aggregate amount of 301 million farthings.

14. The commercial banks of Eden 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 retained earnings in their non-resident enterprises.

16. The residents of Eden buy Hell-bonds worth 300 million crowns.

I.2 Value of transactions in farthing and crown

	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	3,849	11,432	2.97
4. exports of travel	4,333	12,609	2.91
5. provision of pharmaceutical aid	104	318	3.07
6. guest workers’ remittances	56	166	2.97
7. corporate borrowing	1,300	3,900	3.00
8. after-tax profits for the year (reinvested earnings)	1,329	4,000	3.01
9. dividends declared and distributed	897	2,709	3.02
10. portfolio investment income	1,067	3,201	3.00
11. government bonds issued	34	100	2.94
12. privatisation receipts	1,500	4,500	3.00
13. share issues	100	301	3.01
14. debt forgiveness	17	51	3.00
15. reinvested earnings	540	1,620	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 diverse individual transactions on 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 farthing)

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. current transfer		318
6. claims of commercial banks, deposit		166
6. current transfer	166	
7. other capital investment, liabilities, loans	3,900	
7. claims of commercial banks, deposit		3,900
8. reinvested earnings (income)		4,000
8. reinvested earnings in Eden (financial account)	4,000	
9a. dividends (declared)		2,709
9a. liabilities to shareholders	2,709	
9b. reinvested earnings (income)		-2,709
9b. reinvested 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. international reserves		100
12. direct investment in Eden	4,500	
12. international reserves		4,500
13. portfolio investment, liabilities	301	
13. claims of commercial banks, deposit		301
14. other capital investment, assets, loans	51	
14. capital transfer		51
15. reinvested earnings (income)	1,620	
15. reinvested earnings in the rest of the world (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 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 Eden conduct their financial transactions through their resident account keeping 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 effectively represented in the change of the net international investment positions of monetary institutions. (Even though it is the enterprise that exports, the foreign exchange counter value is received on the external nostro account of the account keeping bank, i.e. it is the bank whose claims on non-residents increase. 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 Eden

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	4,821	4,000	821
Direct investment income	1,620	4,000	−2,380
Distributed and remitted income (dividend)	0	2,709	−2,709
Reinvested earnings	1,620	1,291	329
Portfolio investment income	3,201	0	3,201
Current transfers	166	318	−152
II. Capital account	**0**	**51**	**−51**
Capital transfers of other sectors	0	51	−51
III. Financial account *	**66,247**	**58,868**	**7,379**
Direct investment	11,209	7,038	4,171
Rest of the world	0	1,620	−1,620
Reinvested earnings	0	1,620	−1,620
in Eden	11,209	5,418	5,791
Shares and other equity	4,500	0	4,500
Reinvested earnings	4,000	2,709	1,291
Other capital	2,709	2,709	0
Liabilities	2,709	2,709	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	3,743
Assets	50,737	50,894	−157
Liabilities	3,900	0	3,900
IV. Balance of payments total	**114,878**	**110,278**	**4,600**
V. International reserves	**0**	**4,600**	**−4,600**

** Excluding international reserves.*

Notes to Table I.4.

Table I.4. contains data in the structure that will be familiar to users from the standard publication. This table shows the transaction pairs of Table I.3. in the structure of the balance of payments. Departing from the standard publication, however, this table contains the financial account items with gross amounts rather than as a balance. This allows for their reconciliation with components of 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).

II Compiling of the International Investment Position of Eden

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

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 are denominated in crowns, all liabilities in farthings	
4. on the asset side there are only bonds, the price change of which (in farthing) is	6 per cent
5. The prices of shares in portfolio investment assets are unchanged.	
6. on the liability side, the ratio of shares in the portfolio	90 per cent
7. change of the share price compared to the end of the previous month	−12 per cent
8. the price of the bond on the liability side did not change	
9. write-off of doubtful loan receivables (million crown)	100
10. the level of opening positions is optional	

II.2 International Investment Position of Eden

Million farthings

DESCRIPTION	Position at beginning of year	Change in stocks					Position at end of year
		Balance of transactions	Exchange rate changes	Price changes	Other change in stocks	Total	
	(1)	(2)	(3)	(4)	(5)	(6)=(2+..+5)	(7)=(1+6)
ASSETS							
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. International reserves	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
LIABILITIES							
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. International reserves	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

Note: The level of opening positions is optional.

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 claims 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 with 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 with 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 with the balances in the financial account of the balance of payments but its sign depends on its contribution to the stock change: it is "+" if it increases the stock and "–" if it decreases it. In the case of assets, this is contrary to the convention on signs applicable to the balance of payments, where any increase due to transactions is recorded on the expenditure side (debit item). Thus in the case of assets, the balance disclosed in the financial account must be multiplied by (–1).

Considering that financial assets and liabilities arising from other investment 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), and 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 change 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 denominated in crowns among receivables) 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 claims 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.

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(international methodology and national practice)

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