



MAGYAR NEMZETI BANK

**FINANCIAL  
ACCOUNTS  
OF HUNGARY**

**2005**



**Financial accounts of Hungary  
(Data, analyses, methodological  
explanations)**

**2005**



*This publication serves the purpose of describing the content, composition and utilization possibilities of financial accounts, with a view to propagating the benefits of this relatively new statistical area among a wider range of users. The statisticians preparing Hungarian financial account statistics summarize their experience on statistics and the economy acquired in relation to the study of methodological manuals, the survey of practice applied in other countries and the compilation of financial accounts.*

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## Definition of abbreviations

**ÁAK Rt. - Állami Autópálya Kezelő Rt. (State Motorway Management Co. Ltd.)**

Company established by Magyar Fejlesztési Bank (MFB) (Hungarian Development Bank Co. Ltd.), Nemzeti Autópálya Rt. (NA) (National Motorway Co. Ltd.) and the state in 1999 by way of a government decree, as successor to former motorway companies. At the end of 2002, the government purchased its share from MFB. The chief responsibility of the company comprises the maintenance of state owned motor roads and road construction since 2005. Since its activity is partly financed on a business basis, with the collection of toll revenues, the statistical organs were unable to agree on the classification of the institution in the government sector. In 1999, inherited amounts of loan debt were reclassified and assumed by the government at the end of 2002.

**ÁFI - Állami Fejlesztési Intézet (State Development Institute)**

Special financial institution established in the 1980s (from Állami Fejlesztési Bank) which is responsible for financing government investments and intermediating government loans with MNB funds (it also issued bonds abroad in 1990). It is classified in general government in statistics; the central budget officially assumed the assets and liabilities of the institute in the early 1990s. In the financial accounts, it is always classified in central government.

**ÁKK (Rt.) - Államadósság Kezelő Központ (Rt.) (Government Debt Management Agency Co. Ltd.)**

Government institution established in 1995 as part of the Hungarian State Treasury which was transformed into a shareholding company in 2002 by the Ministry of Finance. Since its core activity comprises the management and recording of central budget liabilities, it is in all cases classified under central government.

**ÁPV Rt. - Állami Privatizációs és Vagyonkezelő Rt. (State Privatization and Holding Co. Ltd.)**

State owned company established in 1994 as successor to Állami Vagyonügynökség (ÁVÜ) (State Property Agency Co. Ltd.) and Állami Vagyonkezelő (ÁV) Rt. (State Asset Management Co. Ltd.). Since its core activity comprises the management, recording and sale of equities not held by budget chapters, in the statistics it is in all cases classified under central government.

**CIB - Central-European International Bank**

Credit institution established in 1979, jointly owned by the MNB and non-resident banks which was treated in the statistics as a non-resident institution up to 1997 due to its off-shore form. (Following the merger with its subsidiary branch, it has been operating as a resident credit institution since 1997.) In the financial accounts it is in all cases classified among resident credit institutions, in the sector of other monetary institutions.

**MÁK - Magyar Államkincstár (Hungarian State Treasury)**

Government organ established in 1995 by the Ministry of Finance (in 2002 a shareholding company on a temporary basis) which assumed from the MNB the management of the accounts of budgetary institutions and the records on the assets and liabilities of the central budget. The Treasury carries out both bank and budgetary information supply responsibilities; its reports on the financial position of general government provide important data to financial accounts.

**NA Rt. - Nemzeti Autópálya Rt. (National Motorway Co. Ltd.)**

Company established in 1992 by the Magyar Fejlesztési Bank pursuant to a government decree which was purchased by the government at the

end of 2002. Since its core activity comprises the management and financing of state road construction projects, the financial statistics classify it under central government.

### **ESA95 - European System of Accounts 1995**

Mandatory rule in countries of the European Union (council decree) relating to the compilation of national accounts and the fulfillment of related data supply responsibilities. The annex to the law includes a methodological manual which, as the European version of SNA93, describes the content of the financial and non-financial accounts of the total economy and the method of their compilation. The above methodological manual and the related secondary rules (in addition to SNA93) comprise the basis for the compilation of the Hungarian financial accounts.

### **SNA93 - System of National Accounts 1993**

Methodological manual revised in 1993 under the management of the UN which serves as a recommendation for the preparation of national accounts on a global level. It provided the basis for the elab-

oration or revision of numerous other financial statistical methodologies, prepared in accordance with the IMF manuals (BOPM5 and GFS2001) describing the compilation of the balance of payments statistics and the general government statistics, and the ESA95 manual representing the EU standard for preparing national accounts.

### **EDP - Excessive Deficit Procedure Notification**

Annual statistical statement required by the EU from 1993 for member states, in accordance with the Maastricht Treaty, enabling the measurement of the fulfillment of Maastricht criteria (deficit lower than 3% of the GDP, debt less than 60% of the GDP) on the basis of the budget deficit (ESA) and government debt figures contained therein. (In the event of non-performance, the Excessive Deficit Procedure may be launched against a given country.) In Hungary, the EDP report is jointly compiled by the Central Statistical Office, Ministry of Finance and the MNB (Magyar Nemzeti Bank, the central bank of Hungary), in accordance with the national accounts.



## Summary

The financial accounts comprise the financial statistics relating to the national accounts which indicate the financial worth (financial assets and liabilities) of the total economy and parts thereof (its sectors), reasons linked to its changes affecting the economy and the net lending/net borrowing relationship between the institutional units. The financial accounts function as an integrating statistics which compile and supplement central bank data on sector and instrument statistics (monetary statistics, balance of payments statistics, securities statistics) in a uniform manner, thereby providing consistent information on the financial position of the economy as a whole, allowing comparisons in space and time. Consistency and comparability is also ensured through the application of international statistical recommendations and rules (SNA93, ESA95) relating to national accounts.

The MNB is responsible for compiling financial accounts in Hungary, on the basis of work division between the statistical organs. Since the mid-nineties, the central bank has been making continuous preparations for carrying out the above responsibility through the organization of data collection, acquisition of methodological skills and the elaboration of the data compilation process. As a result of the development process, the range of applied data resources used for the financial accounts and the compilation method of the statistics were finalized in 2002. On the basis of the above, from April 2003, each quarter the MNB publishes the financial accounts of the national economy on its internet website with a quarterly lag. In parallel, it supplies data to the institutions of the European Union, Eurostat, the ECB and other international institutions. The central bank uses the

financial accounts in the process of monetary decision making. Statisticians regularly develop and expand information contained in the financial accounts. Accordingly, in 2003, the time series, initially spanning five years, were revised retroactively to the beginning of 1995 and the beginning of 1990 in 2004, with maintained quarterly frequency. In parallel to the above process, the widening of statistics was commenced with data related to the 1980s and 1970s.

The application possibilities of financial accounts are wide ranging. The segmented analysis of stock data reveals the structure of the financial worth of individual economic sectors, the prevalence of various financial instruments, the weight of the financial intermediary system in the economy and the financial openness of the economy vis-à-vis the rest of the world. Flow data indicates the rate of change in the financial worth of the individual economic sectors in the examined period (quarter, year) and the related reasons. Among the above figures, it is possible to isolate transactions, representing the financing operation resulting from the sale and acquisition of financial instruments, and revaluation, as the impact of the economic environment on the value of assets. On the basis of the above, we may determine the effect of changes in market interest rates and prices on the value of various assets and the worth of individual sectors in the examined period. Transaction related data indicates the type and issuing sector of financial assets preferred by specific sectors for investment purposes, determining the value and type of instruments used by the various institutional units for net lending/net borrowing. The uniform time series of the financial accounts allow the analysis of the changes in volume and flow data in

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time, and the common methodology enables the comparison of domestic data on an international scale. In addition to the above functions, the financial account statistics serve the supplementing and monitoring of non-financial national accounts, for the transaction data indicates the type of financial instruments (issued by other sectors or the

rest of the world) invested in by a specific sector or the whole of the national economy with the disposable amount of income, after consumption and investment (balance of non-financial accounts), thereby satisfying the net borrowing requirement of sectors, spending or investing in excess of their income.

# 1 Methodology





## 1.1. Methodological foundations of financial accounts

### 1.1.1. Role of financial accounts in statistics

The financial accounts comprise the financial statistics a part of the national accounts, indicating in HUF billions the financial assets and liabilities of the total economy and the economic sectors, changes affecting these and the reasons for change. Due to the close link with other (non-financial) areas of national accounts, with a view to better understanding the statistical function of financial accounts, it is purposeful to provide a brief overview of the structure of national accounts. The discussion of the relationship between the financial account statistics and the other financial statistics of the central bank follows.

#### *Structure of the national accounts*

The closed accounting system of national accounts defines the operation and condition of the macroeconomy on the level of the whole economy and the economic sectors through its accounts and balance sheets, built on and linked to each other. The accounts indicate economic events occurring in the given period; the balance sheets reveal the stock of assets and liabilities in the given period. The balances of the individual accounts and balance sheets are the indicators of the economy. The most important such indicators: added value (GDP on the level of the national economy), disposable income, savings, net borrowing or net lending (or financial savings) and net worth.

The system of national accounts is divided into current accounts, accumulation accounts and balance sheets (see Chart 1-1).

The current accounts define the process of production, income distribution and consumption. The production account indicates how added value is produced as a difference between output and intermediate consumption during the production activity. The income distribution accounts indicate the income elements composing added value and other income transfers shaping the level of institutional units' available income. The balance of the use of income account arises as the difference between savings, disposable income and consumption.

The accumulation accounts indicate the elements of change affecting net worth and the stocks of financial and non-financial assets and liabilities.

The capital account records changes affecting real assets related to transactions, i.e. investments. The opening balance of the account corresponds to savings, the closing balance indicates net lending (or financial savings), corresponding to the difference between savings and investment.<sup>1</sup>

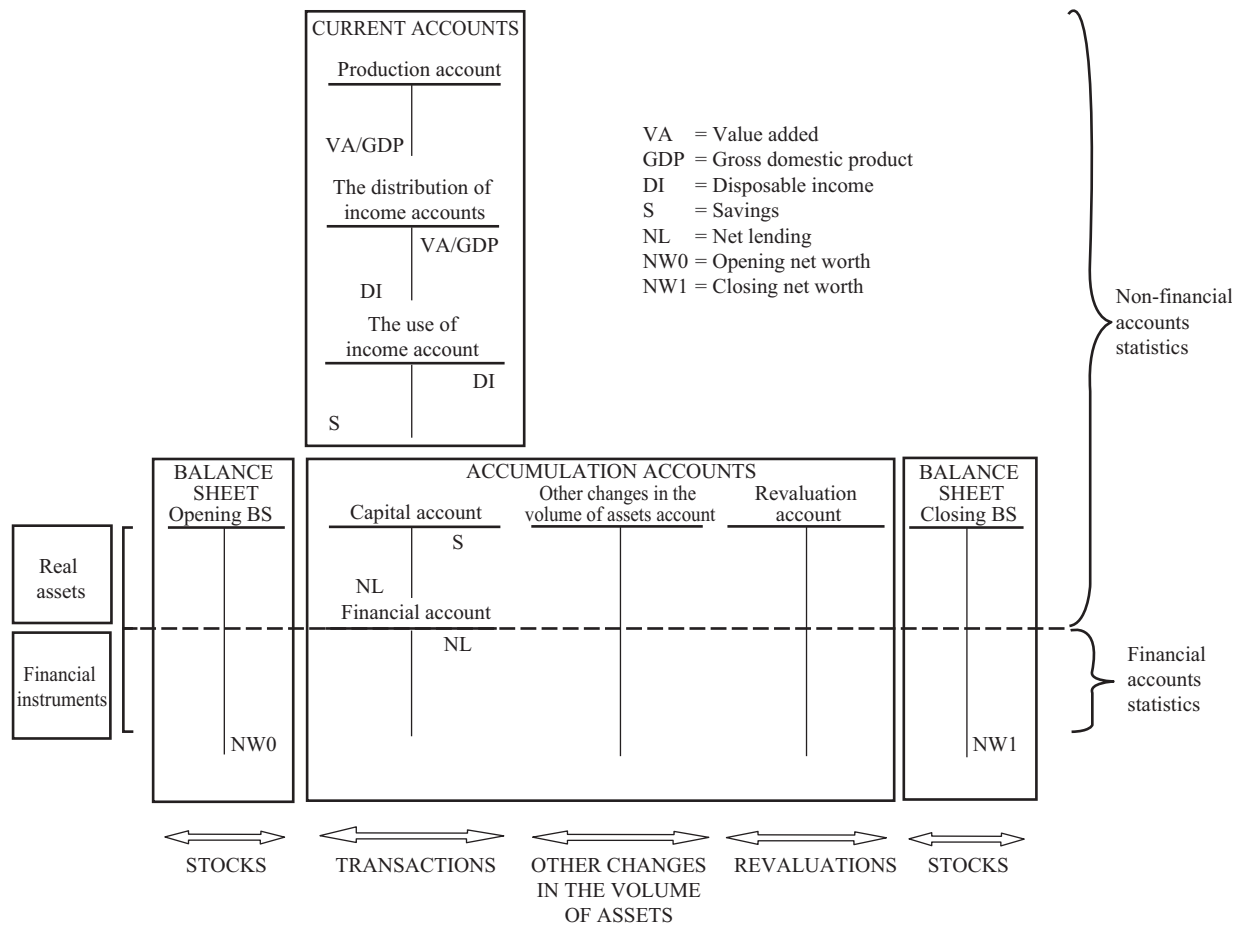
In the more limited sense of the term, the financial account indicates transactions related to financial instruments. The balance of transactions corresponds to net lending, also equaling the closing balance of the capital account. The above correspondence implies that the difference between savings and investment is expressed in the accumulation of financial assets or the assumption of liabilities. The revaluation account records changes in the stocks of non-financial and financial

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<sup>1</sup> The balance of capital transfers is also accounted on the capital account, affect net lending.

**Chart 1-1.**

**The structure of the national accounts**



assets and liabilities due to changes in their prices. The other changes in the volume of assets account are due to special, primarily non-economic factors (resulting from changes in classification, structure), such as natural disasters or technical factors. Among the balance sheets, the opening balance sheets indicate the stock of financial and non-financial assets and liabilities at the beginning of the accounting period, the closing balance sheets those recorded at the end of the accounting period.

The financial account statistics contain parts of the balance sheets and accumulation accounts which indicate the stock of financial instruments and the elements of the change in stocks – parts

of Chart 1-1 – which are marked below the dotted line separating financial and real assets.

It is important to note that the term “financial accounts” is used in a broader and narrower sense in international literature. In the broader sense, the financial accounts include financial assets and liabilities, as well as the balance sheets and accounts indicating the elements of changes in volume. In a narrower sense, in the series of accounts, the financial account follows the capital account, indicating changes arising from transactions linked to financial assets and liabilities. In this study, we shall generally use the term “financial accounts” in the broader sense, deviations from such meaning will be indicated separately.

### *Relationship of financial accounts to other central bank statistics*

In addition to financial account statistics, the Magyar Nemzeti Bank prepares and publishes balance of payments statistics, monetary statistics and securities statistics. All three latter statistical areas are linked to specific sectors or instruments of the financial accounts which are part of the national accounts. Thus, the balance of payments statistics indicate assets and liabilities of resident (domestic) economic sectors vis-à-vis the rest of the world, monetary statistics measure receivables and liabilities of monetary financial institutions (central bank, credit institutions, money market funds) related to other sectors, and securities statistics present the holder sector structure and flow data of major securities issued by residents. All three central bank statistics provide important data for financial accounts, and its products are

comparable in content to the appropriate components of financial accounts. The comparison, however, is complicated by numerous classification, evaluation and technical differences.

In financial accounts, stocks and transaction data for assets and liabilities of non-residents are identical in content to the stocks and financial account data of balance of payments statistics. The largest difference is in the breakdown of data which is due to methodological reasons (see Table 1-1).

We should note that the balance of payments statistics primarily is a flow based statistical area, focusing on the monitoring of flow (transaction) data within a closed system; where in many instances, the stocks are produced through estimations. Contrary to the above, financial accounts should theoretically treat stock and flow data with identical weight, yet (not considering the balance of payments as a data source) the data sources enable the monitoring of stocks

### Table 1-1

**Comparison of sector and instrument breakdown of financial accounts and balance of payments statistics**

Sector breakdown		Instrument breakdown	
Financial accounts	Balance of payments	Balance of payments*	Financial accounts
Central Bank (MNB)	Central Bank (MNB)	Bonds and notes	Long-term securities
Other monetary financial institutions	Other monetary financial institutions	Money market instruments	Short-term securities
Other financial intermediaries Financial auxiliaries Insurance corporations and pension funds Households Non-profit institutions serving households	Other sectors	Financial derivatives From portfolio investments: Equity capital, From direct investments: Equity	Financial derivatives Quoted shares, Unquoted shares, Other equity, Mutual funds shares
Central government State government Local government	General government	From direct investments: Other investments, Other short and long term assets and liabilities	Monetary gold and SDRs, Currency and deposits, Loans, From other receivables/payables: Trade credits

\* Some central bank related instruments may be presented aggregated as "International reserves" in certain tables.

with higher accuracy and the estimation of flow data.

Monetary statistics, the other important fundament of financial accounts, also focuses on stock data, currently publishing such data (balance sheets) only with regard to the monetary institutions sectors. Thus, the products of monetary statistics allow comparison with the appropriate balance sheet data of financial accounts. In this sense, classification and the categories of sectors and instruments are well comparable with the figures of financial accounts. However, varying amounts are listed in the two, under similarly named statistics which is primarily the consequence of differences in methodology, including data content and valuation. Since the monetary balance sheet statistics are published on a monthly basis, with a short lag, in many instances it is not possible to value financial assets at market value; the products indicate stock data with nominal values, or with a book value, supplied from accounting records.

In 1997, the securities statistics of the MNB were expressly prepared for the purpose of supporting financial accounts and satisfying their data requirements. Accordingly, with respect to securities data, the securities statistics are in harmony with information contained in the financial accounts. The range of comparable data are the resident issued mutual funds shares, quoted shares and government securities denominated in HUF.

### 1.1.2. Methodological principles, rules

Methodological principles and rules relating to the compiling of financial accounts are defined in international methodological manuals (SNA93, ESA95) on national accounts. On the basis of the above, in Hungarian practice, statisticians preparing financial accounts apply the general principles below:

- Priority of economic content over legal or accounting contents.
- Enforcement of market valuation, accrual accounting.
- Institutional principle for sector classification, sector classification according to principal activity.
- Correspondence between assets and liabilities (selection of dominant data sources).
- Balances close with zero in a closed economy.
- Sum of components of changes of stocks must equal changes in stocks.
- Gross presentation of interest bearing instruments increased with accrued interest.

#### *Correlation between stocks and flows*

The financial accounts present the opening and closing stocks of financial instruments and the components of changes in stocks. The stocks (balance sheets) indicate the value of the financial assets at a given point in time, while flows reflect trends relating to a specific period (quarter, year). We distinguish 3 groups of flows: transactions, revaluations and other changes in volume. Transactions comprise flows originating from the creation, termination, sale or transfer of financial instruments. Such flows are established through the mutual agreement of the involved institutional units. Revaluations are flows arising from changes of the price of financial instruments. Other changes in volume are flows resulting from technical reasons and not customary economic grounds.

The general formula below holds true for all financial instruments:

$$\textit{opening stock} + \textit{transaction} + \textit{revaluation} + \textit{other changes in volume} = \textit{closing stock}$$

Transactions play a prominent role among the components of flows, for these correspond to economic events over which institutional units have direct control. Transactions are also indicated in



the current accounts of national accounts, thus revaluation and other changes in volume are excluded from the categories of production, income and consumption.

### *Balances*

In addition to financial assets and liabilities, the financial balance sheets also indicate the difference between these in the form of net financial worth. Net financial worth reveals the "external financial position" of a sector, its position as net lender or net borrower. Naturally, changes affecting net financial worth may be divided into 3 types: flows resulting from transactions, revaluations and other changes in volume. The change in net financial worth originating from transactions corresponds to the balance of the financial accounts, net lending/net borrowing, defined in a narrower sense. The change in net financial worth originating from revaluation or other changes in volume corresponds to the balance of the revaluation and other changes in volume accounts calculated for their financial instruments.

### *Rules of valuation*

On the basis of the methodology, the stocks of both financial assets and liabilities must be recorded in the balance sheets at market value. This principle of valuation fundamentally differs from the general valuation principle adopted in business accounting, where inventory value is generally identical to purchase price. According to the approach of national accounts, market value best reflects the true wealth of the individual institutional units. However, in the compilation of financial accounts, the principle of market valuation cannot always be fully used owing to lack of necessary source data. This problem arises primarily

in relation to instruments non traded on markets which are difficult to price.

### *Consolidated and non-consolidated indicators*

The principle of grossing is generally used for national accounts. This means that in the case of financial accounts all assets and liabilities of institutional units must be taken into account, irrespective of whether they refer to a transaction inside or outside a given group. The smallest units of financial accounts are institutions (companies, general government institutions, households, other institutional units). On the level of institutional units, data is in all cases "consolidated"; the statistics do not consider any assets or liabilities of a company on its own behalf. (Accordingly, the financial accounts do not indicate repurchased own shares or bonds.) The difference between non-consolidated and consolidated data is indicated on the level of groups (sectors) created from institutional units. The elimination of financial instruments (consolidation) within groups may be useful when the external financial positions of a given group (say, a sector) or changes in them are to be presented.

### *Timing of accounting, accrual accounting*

Accrual accounting must be used in national accounts. In the case of financial accounts, this means that if a transaction in a non-financial account (e.g. a transaction related to production, distribution of income, consumption or investment) is linked up with one in financial accounts, the two transactions must be recorded simultaneously, in the point of time when the real economy transaction occurs. If no payment is effected when a non-financial transaction occurs, transactions are recorded under other receivables/payables in financial accounts. As financial instruments establish a link

between two institutional units (the creditor and the debtor), it is equally important that transactions affecting financial instruments be recorded by both units simultaneously. In practice, accrual accounting is applied in relation to wages, taxes, contributions, transfers, interest payments, supplies of goods and services.

### 1.1.3. Content of economic sectors

Similarly to other parts of national accounts, international methodologies define the groups of units in financial accounts. Firstly, the classification of units is based on the regional principle (resident – non-resident units), secondly, the methodology classifies residents into sectors on the basis of their economic behavior and characteristics. Units are generally divided into two main groups: residents (domestic) and non-residents (rest of the world). The resident's center of economic interest is located in the territory of the given country, while the same is outside of the given country in respect of non-residents.

#### *Resident main sectors in financial accounts*

National accounts statistics classify resident units into the 5 main sectors below (statistical codes in brackets):

- Non-financial corporations (S.11)
- Financial corporations (S.12)
- General government (S.13)
- Households (S.14)
- Non-profit institutions serving households (S.15)

The sectors were established according to the economic behavior (principal activity) of the institutional units. The general features of the individual sectors are as follows:

The sector of non-financial corporations consists of profit-oriented institutional units the activity of

which comprises the production of marketable goods and non-financial services. (Including, for example, (blocks of owner-occupier flats), in addition to production and service providing companies.)

The sector of financial corporations consists of institutional units which provide financial services. (This sector is typically composed of commercial banks, insurance companies, mutual funds, leasing companies, brokerage firms, pension funds.)

General government consists of units which produce non-market goods and services whose activity is mainly financed by compulsory payments (taxes). (As a general rule, the sector includes all central or local government budgetary institutions, extrabudgetary and Social Security funds.)

The households sector comprises natural entities which primarily behave as the end consumers of goods and services and as the suppliers of the work force. The households sector includes sole proprietors, as well, for the behavior of these may not be isolated from its operating private households.

Non-profit institutions serving households consist of non-market producers of goods and services directly financed or controlled by households. (This sector includes political parties, churches, most foundations and associations.)

#### *Sub-sectors in financial accounts*

For the purpose of providing in-depth analysis, we also publish data on sub-sectors related to financial corporations and general government.

Financial corporations are broken down into the following sub-sectors:

- Central bank (S.121)
- Other monetary (financial) institutions (S.122)
- Other financial intermediaries, except insurance corporations and pension funds (S.123)

Financial auxiliaries (S.124)

Insurance corporations and pension funds (S.125)

The central bank functions as the monetary authority in a given country (the MNB in our case) which is responsible for the issue of banknotes (and often coins) and the management of international reserves. It generally keeps accounts of commercial banks and the government.

Other monetary institutions are financial corporations, except the central bank, which operate as financial intermediaries, and their liabilities generally arise in the form of deposits or close substitutes. Credit institutions and money market funds represent other monetary institutions. The central bank and other monetary institutions jointly compose the group of monetary institutions.

Other financial intermediaries include (non-monetary) financial corporations (not including insurance corporations and pension funds) which take part in financial intermediation but their liabilities are less liquid than deposits. Such institutions are financial and investment ventures, mutual funds (not including money market funds) and their managers.

Financial auxiliaries are financial corporations which do not directly participate in financial intermediation, but their activity supports the same. Consequently, their balance sheets and worth indicate lower figures, for such companies do not deal with the collection, transformation and placement of financial assets, but mediate participants linked to financial intermediation without producing an impact on their own balance sheets. Such institutions are typically exchanges and clearing houses (not including the credit institution clearing house), securities brokers, investment protection funds and institutions carrying out other financial auxiliary services.

Insurance corporations and pension funds represent financial corporations which undertake long

term liabilities (generally of over 10 years) and/or offer insurance services. This sub-sector includes insurance corporations, insurance associations, private and different pension and health funds.

General government (government sector) is divided into the following sub-sectors:

Central government (S.1311)

Local government (S.1313)

Social security funds (S.1314)

Central government incorporates central state administration and its institutions. This sector includes non-profit institutions which are financed and controlled by central government. The group also includes companies owned by central government which conduct quasi-fiscal activities in the field of , distribution of income, provision of specific non-market services and the management of state assets. Presently, such companies include ÁPV Rt., NA Rt., ÁKK Rt., Üzletrész-hasznosító Kft., CASA Kft., Magyar Rádió Rt., Magyar Televízió Rt. and Dunatelevízió Rt.

The local government sub-sector includes local governments of settlements and their institutions and national minorities' governments.

Social security funds cover mandatory, state organized social security (health and pension insurance) and the related institutions.

### 1.1.4. Financial instruments

In an economic sense, financial instruments are set apart from non-financial ones by the fact that financial instruments are assets that are simultaneously the liabilities of other institutional units. The financial accounts statistics present the financial worth of the total economy, or a part thereof (sector), through seven main instruments, including a breakdown of a total of 19 types of instruments. The funded financial instruments are as

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follows (international codes in brackets, further domestic statistical breakdowns in italics):

- Monetary gold and SDRs (AF.1)
  - Monetary gold (AF.11)
  - SDR (AF.12)
- Currency and deposits (AF.2)
  - Currency (AF.21)
  - Transferable deposits (AF.22)
  - Other deposits (AF.29)
    - Other short term deposits*
    - Other long term deposits*
- Securities other than shares (AF.3)
  - Short term securities (AF.331)
  - Long term securities (AF.332)
  - Financial derivatives (AF.34)
- Loans (AF.4)
  - Short term loans (AF.41)
    - Short term real estate loans*
  - Long term loans (AF.42)
    - Long term real estate loans*
- Shares and other equity (AF.5)
  - Quoted shares (AF.511)
  - Unquoted shares (AF.512)
  - Other equity (AF.513)
  - Mutual funds shares (AF.52)
- Insurance technical reserves (AF.6)
  - Net equity of households in life insurance reserves (AF.611)
  - Net equity of households in pension fund reserves (AF.612)
  - Prepayments of insurance premiums and reserves against outstanding claims (AF.62)
- Other accounts receivable/payable (AF.79)
  - Trade credit and advances (AF.71)
  - Other (other) accounts receivable/payable (AF.79)

The statistics generally use instrument types also applied in accounting, with modified content. The instruments are presented and broken

down in the order of liquidity and negotiability. Short term financial instruments have an original maturity of no more than one year (upon issue). Long term instruments have an original maturity in excess of one year. The same instruments are indicated on the assets and liabilities side of the balance sheet, for financial instruments obviously involve the liabilities of other institutional units. (This is why the term instrument is used for the joint definition of assets and liabilities.) The sole exception is constituted by the instrument Monetary gold and SDR; it is a financial instrument of the central banks, but does not represent anyone's liability. The use of instruments in financial accounts is also uniform on the level of sectors, yet there are items which may not be listed among the assets or liabilities of certain sectors.

### *Monetary gold and SDR*

Monetary gold and SDR (special drawing rights) comprise the special reserve instruments of central banks which do not represent the liabilities of any other sectors. The above is presumably based on the fact that a background instrument element exists in relation to both instruments which allows the creation of a financial instrument having value without the creation of the liability of an external unit. In respect of monetary gold, the physical gold reserves constitute such instrument, monetized by the monetary authority. With regard to SDR, the same is represented by the financial contribution related to IMF membership, on the basis of which the international organization allocates SDR to the member organizations. As a result of the above, the monetization and demonetization of gold (creation and termination of monetary gold) and the allocation of SDR is not possible through transactions (for these require

two parties), but only by way of a change in volume. The sale of (available) monetary gold and SDRs between financial institutions, however, constitutes a transaction. The financial accounts statistics record monetary gold and SDR as a foreign exchange instrument; accordingly, revaluation is accounted thereon resulting from the change in exchange rates.

### *Currency and deposits*

Currency and deposits are financial instruments which represent the debt of monetary institutions and possibly central governments (treasuries), which we use as currency, or can easily transform into currency. Currency is the Hungarian forint, foreign currency banknotes and coins. Deposits include transferable deposits and time deposits (other deposits) which may have short term or long term maturities, depending on the term. Deposits are distinguished from credit-type instruments in that these may only constitute the liabilities of monetary institutions (or governments); their creation is initiated by the creditor (depositor) party, and theoretically these may be cancelled (terminated) any time by the debtor. The financial accounts statistics present cash at nominal value (denomination value) and deposits at nominal value increased with accrued interest. Revaluation is accounted on currency cash and foreign exchange deposits resulting from changes in the foreign exchange rates; the rest of the flows are to transactions.

### *Securities other than shares*

Securities other than shares comprise maturing financial instruments which are generally traded on secondary markets, or there is the possibility that such financial instruments are traded. (For

such purpose, these are provided with standardized features supporting negotiability, and are generally issued in series composed of securities with similar features.) Such securities include financial derivatives. Apart from derivatives, securities other than shares are generally interest bearing instruments incorporating a credit relationship, presented in financial accounts statistics in a short term and long term breakdown. The largest group of such securities includes HUF and foreign exchange government bonds, various treasury bonds, compensation bonds, local government bonds, corporate and bank bonds, mortgage bonds, deposit certificates and bills of exchange.

### *Loans*

Loans represent financial instruments with maturities which are typically established upon the lending of money, and generally they are not present on secondary markets. In addition to money lending, this group includes claims and debts arising from deferred and installment payments, financial lease, factoring and repurchase agreements. Thus, loan instruments indicated in national accounts represent a wider category than the terms of credit and loan defined in accounting. Financial accounts present credit-type assets at a nominal value increased with accrued interest.

### *Shares and other equity*

Shares and other equity comprise financial instruments linked to shareholder rights and other rights providing yields. This group includes quoted and unquoted shares, other equities and mutual funds shares. Shares are securities issued by companies operating in the form of shareholding

companies. Other shares (non-share equities) represent the liabilities of companies with other corporate forms (co-operatives, limited liability companies, limited partnerships, etc.) which, in a legal sense, are not securities. Statistics, however, consider these to be financial instruments incorporating an ownership. Mutual funds shares comprise the liabilities of various mutual funds. Quoted shares and mutual funds shares are included in the statistics at an observed market value, while unquoted shares and other equities, in the absence of additional information, are listed at an adjusted book value of own equity.

### *Insurance technical reserves*

Insurance technical reserves represent the reserves of insurance corporations and pension funds accumulated on behalf of customers. These special instruments are always booked among the liabilities of the affected insurance corporations and funds, but customers seldom record such amounts as assets, financial instruments. In financial accounts, such instruments are added to the balance sheets and accounts of partner sectors on the basis of information supplied by the insurance corporations and funds. A portion of the insurance technical reserves is presented by the reporting institutions at market value, while others record these at book value, in accordance with accounting rules. As to the type of reserves, these may be life insurance and pension fund reserves managed on behalf of households or other insurance technical reserves, where the beneficiary may be any insured sector.

### *Other accounts receivable/payable*

Other receivables and debts are generally claims and debts outstanding on a temporary basis,

which support the enforcement of accrual accounting, bridging the time differences linked to economic events and the related financial settlement. Such amounts are typically receivables from the supply of goods and services, where the related advance payments are accounted for in the category of trade credits, advance payments, while other receivables primarily indicate items arising from the accrual accounting of taxes, contributions, subsidies and wages.

### **1.1.5. The applicability and limitations of financial accounts**

Information disclosed in financial accounts and balance sheets can be put to a wide range of uses, the most important being information on the net lending/net borrowing position of the individual sectors. Such information reflects the financial balance of a given sector during a certain period. This balance takes the form of either net supply or demand on the financial market. As the net lending/net borrowing indicator in financial accounts is calculated from changes arising from transactions in financial instruments (below the line), it can be used as a reliable guideline to evaluating the reliability of the net lending/net borrowing indicator calculated on the income and investment side (above the line). The difference between the two indicators calculated from the two directions may indicate the shortcomings of and errors in statistical accounting.

The net lending/net borrowing indicator is of utmost importance in general government as it is the one of the indicators to which the Maastricht criteria must be applied. (In the so-called EDP Notification prepared in the framework of the excessive deficit procedure, measuring the above, the balance must be presented from above the line, and also reveal the differences in

net lending/net borrowing position calculated both from non financial and financial instruments side.)

Data on the stocks of financial assets and liabilities describe the financial relations of the sectors at a given moment in time, their financing patterns, the depth of financial intermediation, and the sum of gross and net assets and liabilities. The revaluation of financial assets and liabilities represents important contributory information for analyzing the behavior of institutional units, as real holding gains, revaluation adjusted for the effects of inflation, possesses properties similar to those of income – institutional units may spend it in a given period in a way that the real value of their initial wealth does not diminish.

A number of restraining factors should be taken into consideration when using the financial accounts. Given that, in compiling the financial accounts, it is stock data that are primarily collected and transactions are often not directly observed but are calculated from the stock data using estimates, the reliability of transaction data is lower than that of stock data. It is a widely shared view among compilers of national accounts that the net lending indicator calculated from above the line (i.e. from the income and investment sides) is generally a more reliable indicator than net lending calculated from below the line (from transactions in financial instruments).

Through its effect on the value of stocks of financial assets and liabilities, inflation may distort interest income and revaluation significantly, particularly, if those stocks are large (as a proportion of GDP). Obviously, these distorting effects are reflected in transactions and revaluations in the financial accounts, making it considerably more difficult to perform economically reasonable comparisons between data both over time and on an international scale.

We provide examples below to demonstrate how certain typical economic events exercise an impact on financial accounts and the non-financial parts of national accounts.

### *Transactions only affecting the financial account*

These transactions occur when an institutional unit grants or takes up a loan, repays its existing debt, or sells or purchases a financial asset. In such cases, the increase/decrease in an institutional unit's financial assets is offset by the decrease/increase in other financial assets or the increase/decrease in liabilities. Such transactions do not have a direct impact on the economic indicators of the parties to the transactions – they merely affect the structure of the parties' financial assets and liabilities. Consequently, such transactions do not influence production, income, saving, net lending/net borrowing or net worth. For example, if the government sells its holdings of shares to individuals at market value, then its claims arising from shares are replaced by cash, while for households the decrease in cash is associated with an increase in their holdings of shares. (If the state sold its shares below the market price, that would affect both the government's and households' net financing capacity and wealth, as in this case the government would provide a transfer affecting its financial assets.)

### *Transactions affecting financial and non-financial accounts*

In the event that such transactions occur, a transaction on a non-financial account is associated with another transaction taking place on the financial account. In these cases, there is a change in all economic indicators (balances) of

the institutional units involved in the transaction, i.e. in those which are between the concerned non-financial account and the financial accounts. For example, if an individual buys a service from an enterprise, then the value added, disposable income, saving, net lending/borrowing and net worth of the corporate sector also increase, as, in the case of the corporate sector, this transaction must be recorded on the production account, in addition to the financial account. For the household sector, using the service in question is treated as consumption, which is recorded on the uses of income account. Thus, saving, net lending and net worth of households decrease. However, the sector's value added and disposable income do not change.

### *Changes in the market value of financial instruments*

This non-transaction flow only affects net worth in the national accounts of the institutional units involved. However, it is useful to note that the effect of real holding gains and losses is similar to the increase or decrease in income. For example, if the exchange rate of the national currency appreciates vis-à-vis a foreign currency, then a holding loss and a decline in net worth are recorded for households on their deposits denominated in foreign currencies, and a holding gain and an increase in net worth are recorded for other monetary institutions. The indicators of value added, income, saving and net lending/net borrowing do not change for either sector.



## 1.2. The compilation methods of financial accounts

### 1.2.1. International experience in the area of compiling financial accounts

In most countries compiling financial accounts, annual and quarterly statistics are prepared separately (with different data sources and systems, varying content and deadlines, often within different institutions). The above practice is explained by the fact that the compilation of annual stock and flow statistics on the basis of the methodology of national accounts was developed with a background of decades of practice, while many countries commenced the development of quarterly financial accounts only in the past years. The elaboration of quarterly statistics resulted in the enhanced role of central banks even in countries where the preparation of annual statistics was referred to the responsibility of statistical offices. The separated compilation of annual and quarterly accounts resulted in the inevitable differences in the end product; some countries and international statistical organs make major efforts to eliminate such discrepancies.

The difference between the financial accounts of the central banks and those of the statistical offices typically reveals that the figures of the prior primarily rely on banking-supervisory data, indicating harmony with other bank statistics, while the latter institutions rely more heavily on corporate and government statistical data collection, and their figures reveal greater harmony with the non-financial parts of national accounts. The use of other financial statistics in different countries varies in the process of compiling financial accounts. The quality of the balance of payments statistics and the accessibility of other corporate data determines whether information on the rest of

the world derives from the balance of payments, and whether data of financial accounts on the rest of the world corresponds to figures contained in the balance of payments statistics. The case is similar in respect of monetary statistics which, moreover, primarily focuses only on stock data. Most countries do not record stock statistics on securities in the breakdown of holder sectors, therefore the share of individual sectors is determined on the basis of the total stocks as a residue, with the deduction of known partial amounts. Access to the data of non-financial corporations and government organs also varies greatly, from full access or sampling data collection to the complete absence of data sources.

Beyond the above, major differences mark the compilation methods of financial accounts in the various countries. Contrary to Anglo-Saxon practice, until recently, the position of individual sectors comprised the chief indicator in European financial accounts, and less emphasis was placed on presenting net lending/net borrowing relations of sectors. Thus, in many countries data sources, data compilation and the products are based on the simple balance sheets of sectors which do not include (in due depth) information on the counterpart sector. The compilation of financial accounts is generally performed per sector; the correspondences required in financial accounts may only be verified on the level of aggregates and not on the level of component instruments or sectors. However, in contrast to Anglo-Saxon practice, in Europe, consistency is expected of data on sectors and instruments on the level of the national economy which, contrary to independent data compilation per sector, results in the reliance on dominant data sources

and the adjustment of the data of subordinated sectors or instruments.

### 1.2.2. Principles of compiling Hungarian financial accounts

The compilation of financial accounts serves the purpose of providing full scope, detailed, uniform, consistent, regular and fast statistics on the financial position and the net lending/net borrowing relationships underlying the economy as a whole and its individual sectors, in accordance with methodological principles. The above process, however, sets major demands on data sources and the compilation procedure. As a principle, all available data sources are used for financial accounts, but the moderation of the strain on data suppliers and central bank resources is an important consideration. Thus, in respect of criteria applied to detailed statistics of good quality, produced economically, with high frequency and short lags, a compromise solution was to be devised, which eventually resulted in products of good quality.

The recognition of limits and possibilities lead to devising the optimal solution. Firstly, it was established that financial accounts are an integrating statistics which must be in harmony with other central bank statistics based on the same methodological principles. Through systematic development and expansion, financial account statistics are not only in harmony with the above statistics, but partly rely on them. Secondly, it was recognized that corporate and general government accounting products satisfy statistical demands only to a limited degree. For this reason, in place of compiling financial accounts through independent, internal data sources for each sector, in the framework of the introduced solution, the data directly arriving either from financial

corporations or from other central bank statistics would serve as the primary data source, and the corporate and general government data would only play a supporting role in areas which may not be covered by the statements of financial corporations.

By way of the selected method, it has become possible to acquire 2/3 of data contained in financial accounts from other central bank statistics, while the remaining 1/3 originates from external data collection. Furthermore, the statistics have no data sources that the data provider produces only for the purposes of the financial accounts. Thus, the quality, detail, frequency and time lags of financial accounts is fundamentally determined by the features of partner statistics; the quarterly frequency and the lag was established through their adoption. Similarly to other central bank statistics, annual and quarterly financial accounts are not prepared separately; the annual figures are produced from the appropriate quarterly indicators. The statistics must accordingly be of good quality and full depth on a quarterly basis. The largest obstacle, in this regard, is posed by corporate data produced annually, with long lags, which must be divided into quarters and estimated in advance. The reliability of such estimates determines the discrepancy between the preliminary and final data of financial accounts.

Since the data sources of financial accounts are available with varying regularity, and the other central bank statistics, used as source, also apply a different revision practice, in the course of preparing the financial accounts, for each quarter the most up-to-date, accessible information is used retroactively. Regular data revision offers the advantage of supplying fast information to users on changes in the data sources. The disadvantage is that the data may change regularly, retroactively for several years.

By virtue of the fact that the Hungarian financial account statistics primarily rely on bank statistics, instead of data compilation based on independent sources for each sector, it applies the macroeconomic evidence that a financial asset simultaneously arises as the liability of another unit, i.e. the value of such instrument booked on the asset side of one party is booked on the liability side of the other party with a corresponding amount. The MNB collects detailed partner sector information from major financial corporations and includes it in the financial accounts of counterpart sectors. Thus, the Hungarian financial accounts not only provide information on individual, separate sectors, but on the level of specific instruments, it is possible to determine the financial relationship between sectors and specify which instruments issued by an institutional unit are held by another. In addition, the compilation of financial accounts within a closed system of individual instruments establishes full consistency in the statistics.

Contrary to other financial statistics, stock and flow data are coequal in the statistics of financial accounts. Data sources, however, generally only provide balance sheet data from which the desired components of the changes in volume must be produced by way of estimates. In certain instances, only flow data is available and stocks are produced from accumulated flows. The accuracy of both types of estimates is conditional on the availability of supplementary information on the existence and value of revaluation and other changes in volume. The calculation of stocks or the missing flow component is determined by adding the periodical flows (sum of transaction, revaluation and other changes in volume) to the stock recorded at the beginning of the period to produce the stocks at the end of the period. The above formula is in all cases

valid in the Hungarian financial account statistics, for an element is always calculated as a residue.

The Hungarian financial accounts have the advantage of being statistics composed of time series with a uniform and consistent structure. With data sources changing in time, this is a viable solution only if the statisticians deduce with estimates the desired breakdown and content along the full length of the time series. There are thus no discontinuities in the time series, but the quality of the statistics gradually worsens retroactively. (With regard to the past years, adjustments were only required in respect of a few percent of stock data, but the rate of revised data could reach 70-80 percent in relation to the first half of the 1990s.) This does not pose a problem because the whole of the financial worth, the financial instruments and the role of financial intermediation were much smaller in the beginning of the period covered by the financial accounts. It is also important to note that the source data fully cover the examined effects, therefore estimates are only applicable on the level of breakdowns and classifications; the supplementing of data was basically unnecessary.

### 1.2.3. Data sources of financial accounts

Hungarian financial account statistics rely on over 50 data sources, roughly ten of these are linked to data from partner institutions originating from other statistics of the MNB, while the remaining external data is collected from companies conducting financial activities or government organs. The largest outside data source is represented by the data supply of the tax authority (APEH) on the annual balance sheets comprising the annex to the corporate tax returns (APEH data base).

## Magyar Nemzeti Bank

Main areas of origin of data sources:

- Other central bank statistics (balance of payments, monetary statistics, securities statistics)
- Balance sheet data of MNB (accounting statements)
- Reports of other financial corporations (insurance corporations, funds, mutual funds and ventures, financial ventures, Student Loan Center)
- Balance sheet data contained in the tax declarations of corporations (APEH data base)
- Data in annual reports of corporations and in the corporate register
- General government, budgetary data (balance sheets, cash flow statements, debt)
- Reports of corporations classified into general government (ÁPV Rt., ÁKK Rt., NA Rt., etc.)
- Data on non-profit institutions (data from Central Statistical Office)

- Supplementary information (prices, exchange rates, price indices, interest rates, wages, etc.)

Experts preparing financial accounts receive on single occasions thousands of figures from internal bank statistics, relating to a given date or period. Hundreds of figures originating from the MNB and groups of other financial corporations are included in the accounts. Millions of figures are retrieved semi-annually from the APEH database which are aggregated, and only a few hundred of these are integrated into the financial accounts. Of the several thousand figures collected from the area of general government (primarily from the Hungarian State Treasury), only a few hundred are used in the compiling system of the financial accounts, the rest chiefly satisfy the demands of the analysis departments of the central bank.

**Table 1-2**

**Characteristics of the main sources of financial accounts**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Balance sheet of MNB	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available
Balance sheet of OMFI sector	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available
Insurance corporations	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available
Mutual funds' balance sheet	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available
Securities statistics	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available
Balance of payments stat.	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available
Other financial intermediaries	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available
Government balance sheets	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available
Government debt data	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available
APEH corporate balance sheets	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available
Annual reports of corporations	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available	not available

Legend:

Frequency (Row 1)	not available	annual	quarterly	monthly
Breakdown (Row 2)	not available	minimal	partial	adequate

In the course of the experimental compilation of financial accounts, the MNB assessed the various, accessible data sources, data collections and products serving statistical, accounting, supervisory or budgetary purposes. In most cases, the financial accounts statistics were based on existing information sources; the bank requested the supply of input from institutional units and partner statistics in possession of such data, and not input which may be simply, directly accessed from financial accounts (see Table 1-2). The surplus load on data suppliers is, thus, reduced to a minimum.

From 1997, the MNB launched several new data collection procedures and expanded existing statistics, in consideration of the demands of financial accounts. As a result, from 1997, most of data sources are accessible with a minimum quarterly frequency. Among outside data sources, the largest problem is related to the annual frequency and long lags of corporate balance sheet data supplied by APEH, considering that these figures are relied on most heavily. In most cases, the quality (content, breakdown, valuation) of data sources does not formally fulfill the requirements of financial

### Table 1-3

The coverage of financial accounts with data sources by instruments and sectors

Instruments	Sectors	Non-financial corporations	Central bank (MNB)	Other monetary institutions	Other financial intermediaries	Financial auxiliaries	Insurance corporations and pension funds	Central government	Social security funds	Local government	Households	NPISH	Rest of the world
<b>Financial assets</b>													
Monetary gold and SDRs													
Currency													
Deposits													
Securities other than shares													
Loans													
Shares and other equities													
Insurance technical reserves													
Financial derivatives													
Other accounts receivable													
<b>Liabilities</b>													
Currency													
Deposits													
Securities other than shares													
Loans													
Shares and other equities													
Insurance technical reserves													
Financial derivatives													
Other accounts payable													

■ from own sector source   
■ from other sectors   
■ estimation   
■ not relevant

accounts. The introduction of a uniform breakdown of sectors, fulfilling national accounts related requirements, in 2001 represented major progress in the area of bank counterpart statistics.

In relation to the data coverage of sectors and instruments in financial accounts, full ranging information on instruments is in most cases supplied from internal sectors or counterpart information. Source data is supplemented with estimates in relation to cash, shares and other assets/liabilities. Despite the scope of used data and estimates, data in financial accounts on cash, loans, insurance technical reserves, financial derivatives and other receivables is not complete in relation to individual sectors. With the exception of financial derivatives, such shortage in data is linked to small amounts and does not affect the use of the statistics (see Table 1-3).

From 1999, the MNB has been determining in data supply guidelines the content of outside reports collected for the purposes of financial accounts and the related terms of submission. The data collection is carried out in the framework of the government decree on the National Statistical Data Collection Program, the decree of the central bank's governor, or pursuant to agreements concluded between institutions. Since 2002, the MNB has not been introducing new forms of data collection serving the financial accounts; existing data sources are expanded and developed in warranted cases.

### 1.2.4. Products of financial accounts

A quarterly publication is published with data on financial accounts on the home page of the MNB, in the form of Excel tables. The central bank simultaneously supplies data to Eurostat and the European Central Bank on the detailed financial accounts and debt of general government and the

consolidated accounts of all sectors. On two occasions each year, at the end of February and August, data supported with financial accounts are presented on general government debt and the financing of general government in the framework of the EDP Notification. In addition to the above, the MNB satisfies the data demand of other international organizations such as the IMF, OECD and BIS.

Data of financial accounts is generally presented in two ways: in the form of tables and time series. The comprehensive tables (see Table 1-4) indicate stocks (balance sheet) and the components of flows in relation to a specific time or period (quarter, year), with the listing of all sectors and instruments. The comprehensive tables are most appropriate for revealing relationships between the sectors and the study of the role and distribution of different financial instruments in the total economy. In the time series tables (see Table 1-5), the time axis runs along the sectors or along the breakdown of the instruments, enabling in a single table the analysis of the distribution of an instrument through sectors in time. For the purpose of analyzing the trends, this form of display offers the advantage of a single table presenting the full period covered by financial accounts.

In the various products, the total financial assets of the economy or a particular sector are broken down into eight groups of assets, and these are subdivided into a total of 18 categories of instruments. The liabilities are composed of seven groups which include 17 instruments. The Monetary gold and SDR instruments are missing on the liabilities side because these do not represent the debt of anyone. Net financial worth corresponds to the difference between total financial assets and total liabilities. If not stocks but flows are indicated, the table reveals periodical changes in financial assets and liabilities and in

**Table 1-4**

**A sample of the comprehensive tables with sector and instrument breakdown**

billion HUF

Instruments \ Sectors	Non-financial corporations	Central bank (MNB)	Other monetary institutions	Other financial intermediaries	Financial auxiliaries	Insurance corporations and pension funds	Central government	Social security funds	Local government	Households	NPISH	Rest of the world
<b>Financial assets</b>												
Monetary gold and SDRs												
Currency												
Transferable deposits												
Other deposits												
Short-term securities												
Long-term securities												
Short-term loans												
Long-term loans												
Quoted shares												
Unquoted shares												
Other equity												
Mutual funds shares												
Life insurance reserves												
Pension funds reserves												
Non-life insurance reserves												
Financial derivatives												
Trade credits and advances												
Other												
<b>Liabilities</b>												
Currency												
Transferable deposits												
Other deposits												
Short-term securities												
Long-term securities												
Short-term loans												
Long-term loans												
Quoted shares												
Unquoted shares												
Other equity												
Mutual funds shares												
Life insurance reserves												
Pension funds reserves												
Non-life insurance reserves												
Financial derivatives												
Trade credits and advances												
Other												
<b>Net financial worth</b>												

the net financial worth. The transaction component of flows is most frequently presented. Such data indicate the transactions of financial assets and liabilities, their balancing item corresponds to the change in net financial worth due to transactions, otherwise termed as net lending (positive figure)

or the net borrowing requirement (negative figure). The comprehensive table, or time series table, indicating counterpart sectors, is one of the most complex types of table. It is evident that even with a listing of main counterpart sectors, the breakdown of instruments must be limited for the purpose of

## Table 1-5

Time series with instrument and partner sector breakdown (referring to one sector)

billion HUF

Period (quarter) Instruments	1990. Q1	...	...	2002. Q1	2002. Q2	2002. Q3	2002. Q4	2003. Q1	...	...	...
<b>Financial assets</b>											
Monetary gold and SDRs											
Currency											
Deposits											
Central bank											
Other monetary institutions											
Securities other than shares											
Non-financial corporations											
Financial corporations											
General government											
Rest of the world											
Loans											
Non-financial corporations											
Households											
Rest of the world											
Shares and other equities											
Insurance technical reserves											
Financial derivatives											
Other accounts receivable											
<b>Liabilities</b>											
Currency											
Deposits											
Securities other than shares											
Domestic sectors											
Rest of the world											
Loans											
Central bank											
Other monetary institutions											
Other domestic sectors											
Rest of the world											
Shares and other equities											
Corporations											
Rest of the world											
Insurance technical reserves											
Financial derivatives											
Other accounts payable											
Corporations											
<b>Net lending/net borrowing</b>											

creating a table with an understandable format. In place of partner sectors, for example, the denomination based breakdown of instruments can be indicated (HUF/FX).

A comprehensive table is quite effective in revealing the connections between stock and flow data, if it covers a period (quarter or year) which presents the opening stocks, the components of the changes in stocks and the closing stocks (see Table 1-6). Such a table helps in illustrating how in the examined period, the financial worth of a given sector changes for any reason (transaction, reval-

uation, other changes in volume), presenting the size of such change (full change in stocks) and starting and closing level of stocks (opening and closing stocks). The components of changes in stocks may be expanded with the presentation of operational indicators.

The transaction matrix, indicating the net lending/net borrowing relationship between sectors, has the simplest structure, but is the most difficult to set up. This product illustrates how the net lending/net borrowing requirement of individual sectors derives from the relationship to the other sectors;



**Table 1-6**

**Financial worth and components of changes in financial worth (referring to one sector)**

billion HUF

Instruments	Composition					
	Stocks (end of period)		Changes in stocks	Of which:		
	Dec. 2003	Dec. 2004		transactions	revaluations	other changes in volume
<b>Financial assets</b>						
Monetary gold and SDRs						
Currency						
Deposits						
Central bank						
Other monetary institutions						
Securities other than shares						
Non-financial corporations						
Financial corporations						
General government						
Rest of the world						
Loans						
Non-financial corporations						
Households						
Rest of the world						
Shares and other equities						
Insurance technical reserves						
Financial derivatives						
Other accounts receivable						
<b>Liabilities</b>						
Currency						
Deposits						
Securities other than shares						
Domestic sectors						
Rest of the world						
Loans						
Central bank						
Other monetary institutions						
Other domestic sectors						
Rest of the world						
Shares and other equities						
Corporations						
Rest of the world						
Insurance technical reserves						
Financial derivatives						
Other accounts payable						
Corporations						
<b>Net financial worth</b>						

## Table 1-7

**Net lending/net borrowing of sectors by partner sector breakdown (sample table)** billion HUF

Partner sectors \ Sectors	Non-financial corporations	Financial corporations	General	Households	NPISH	Rest of the world
Non-financial corporations	0	20	150	50	0	100
Financial corporations	-20	0	-600	100	10	500
General government	-150	600	0	260	-10	500
Households	-50	-100	-260	0	-5	0
NPISH	0	-10	10	5	0	-5
Rest of the world	-100	-500	-500	0	5	0
<b>Total</b>	<b>-320</b>	<b>10</b>	<b>-1200</b>	<b>115</b>	<b>0</b>	<b>1095</b>

## Table 1-8

**Net lending/net borrowing of sectors by instrument breakdown (sample table)** billion HUF

Instruments \ Sectors	Non-financial corporations	Financial corporations	General	Households	NPISH	Rest of the world
Monetary gold and SDRs	0	10	0	0	0	0
Currency and deposits	300	-700	100	390	10	-100
Securities other than shares	0	500	-800	0	0	300
Loans	-730	500	100	-160	-10	300
Shares and other equities	-10	-10	-100	10	0	110
Insurance technical reserves	100	-300	0	200	0	0
Financial derivatives	0	10	0	0	0	-10
Other accounts receivable	20	0	0	0	0	-20
<b>Net lending/ net borrowing</b>	<b>-320</b>	<b>10</b>	<b>-700</b>	<b>440</b>	<b>0</b>	<b>580</b>

specifying which other sectors financed the given sector, and which other sectors were financed by the latter in the examined period. The above statement may only be produced if the breakdown of the assets and liabilities of individual sectors are available on the basis of counterpart sectors, on the level of instruments (see Table 1-7).

The net lending/net borrowing relationship is also

well revealed if changes arising in net financial worth from transactions are examined per instrument (see Table 1-8). In this case, the relationship between the sectors may also be deduced from the net transactions of instruments, in the absence of information on counterpart sectors. The above allows us to establish the relationship of specific instruments, or transactions, to particular sectors.

## 1.3. Compilation of quarterly financial accounts from 1990

Detailed, quarterly financial accounts of high quality have been prepared since the beginning of 1990, for bank data sources were prepared with minimum quarterly frequency in 1990, in a satisfactory breakdown, and external data sources have also been regularly available since the end of 1989.

### 1.3.1. Compiling process of financial accounts

In accordance with the organizational structure and division of work described above, the Statistics Department of the MNB compiles financial accounts on a quarterly basis, with a lag of one quarter. Data related to previous periods are revised and updated each quarter. The process of account compilation is significantly determined by the availability of source data. The initial data – the balance sheets of the MNB and credit institutions – are accessible one month following the relevant period; securities statistics and the balance sheets of general government and financial intermediaries are available with a lag of roughly two months. The reports of pension, health and self-support funds are received after two months; data on the balance of payments is available (published concurrently with financial accounts) with the longest lag of nearly three months. The above arrangement necessitates the fixing of the compilation process in the period of three months. (Since annual corporate data is received infrequently and with long time lags, the preparation of financial accounts may not be adjusted to such times.)

Experts preparing financial accounts compile time series from the data of various data sources, which contain submitted data with the original structure and frequency. In each quarter, following

the receipt of source data, statisticians update these data stocks of time series and supplement them with new data. Changes affecting the data sources generally result in discontinuities in the time series, necessitating the recording of separate data sources in relation to specific periods. Statisticians develop modules for such data sources, with changing structures, which arrange data used in financial accounts, acquired from data sources, into time series with uniform structure and content, supplemented with estimates and calculations. These time series are incorporated in the compilation system of financial accounts, which in turn, produces the financial accounts following verifications and calculations. Data sources may be classified on the basis of the availability, quality and detail of data. Accordingly, data contained in all data sources is only included in the statistics if it may not be accessed from data sources on a higher level of the data hierarchy. Data on securities issued by residents are arranged in separate modules; such instrument data – primarily relying on the securities statistics of the MNB – enjoys a priority over all other data sources. The next level of hierarchy indicates data of the balance of payment statistics in respect of the (other than securities) assets and liabilities of resident sectors vis-à-vis the rest of the world. The following data follows, as ranked within the hierarchy: balance sheet of the MNB (excluding securities and the rest of the world), balance sheet of credit institutions (excluding securities, the rest of the world and the MNB) and the balance sheet of other, non-monetary financial corporations (other financial intermediaries, insurance companies, funds, etc.), with the exception of data already acquired from data sources referenced above.

In addition to all information required for the financial accounts of financial corporations, the aforementioned bank statistics supply most of data used for the accounts of the other sectors (as counterpart sectors). Beyond the above, data originating from general government sources are incorporated to present assets within general government and the relationship with non-financial corporations and households. Statisticians use corporate data and estimates for explicating inter-company assets and the financial relationship between corporations and households. Since the central bank does not collect data from households, it is not possible to present the financial relationship between households in the financial accounts; the household sector is only represented with consolidated accounts.

The financial accounts statistics are primarily based on data sources relying on data of balance sheets and stocks. The balance of payments statistics constitute an exception in this regard; since collected data and the products generally present flow data, and stocks are often accumulated from flow related information. For the above reasons, the compilation of financial accounts commences with the collection of stocks and their arrangement in uniform time series; the components of flows (with the exception of the balance of payment statistics) are determined subsequently. Central bank statistics, securities statistics and monetary statistics, traditionally focusing on stocks, increasingly supply flow data, estimated for the purposes of financial accounts. The statisticians of financial accounts are responsible for producing estimates on previous periods and on changes in volume related to other data sources. The process of estimation first involves revaluation and the determination of other changes in volume, and the transaction component is produced as residue of the total flow. Statistics apply revaluation in relation to

securities and foreign exchange instruments. The market or estimated market pricing of securities, and the calculation of revaluation arising from changes in the foreign exchange rates of loans, deposits and securities denominated in foreign currency is conducted accordingly. To support the above process, separate records are kept on HUF and FX instruments in the financial accounts. The special components of changes in stocks, the operational indicators, are produced in the final phase of the compilation of financial accounts. For the purpose of calculating the above figures, the fundamental instruments of financial accounts are divided into interest bearing and non-interest-bearing instruments; among interest bearing ones, instruments with interest above the rate of inflation are separated from those with interest below inflation (not producing real interest). Statisticians link interest rates to all types of instruments and record various inflationary time series. Of the quarterly transactions of instruments bearing interest higher than inflation, the inflationary interest is deducted as inflationary compensation (the product of average stock and inflation), while the quarterly nominal interest (product of average stock and interest rate) is deducted for instruments bearing lower than inflation interest. The remaining amounts are the operational transactions or the transactions filtered for inflation.

### **1.3.2. Retroactive revision of data, creation of uniform time series**

In the course of 2003-2004, the data sources of financial accounts – on the basis of necessary efforts and set objectives – reached a level which enabled the production of statistics with the desired detail and quality. Thus, with the use of past experience and figures relating to the years 2003-2004, the basic data of financial accounts was again compiled retroactively. The

main discontinuities below were to be remedied in data sources in the course of revision:

- Insurance corporations report the breakdown of insurance technical reserves by holder sectors only as of 2004. Consequently, previous estimates had to be revised retroactively.
- The MNB required data providers to present data on money market funds in the sector of other monetary institutions from the beginning of 2003. Prior to the above date, such data was listed jointly with the figures of other mutual funds in the sector of other financial intermediaries. Thus, these figures were subsequently reclassified.
- The balance sheets of financial and investment corporations, in the breakdown of partner sectors, are available since the end of 2002. Primarily loans extended by such ventures and the sector breakdown of other assets and liabilities had to be revised.
- In the summer of 2001, the MNB introduced in its statistics the sector breakdown in accordance with the requirements of financial accounts. Appropriate sector classification was required for previous periods, in relation to all instruments.
- Prior to 1999, quarterly balance sheets are not available from budgetary chapters and financial and investment corporations. Data had to be estimated from less detailed annual balance sheets.
- Prior to 1997, insurance corporations and mutual funds only supplied annual balance sheets; the balance of payments statistics and balance sheets of banks were prepared in a shorter breakdown, and no securities statistics were available.
- Prior to 1997, CIB Nemzetközi Kereskedelmi Bank was recorded as a non-resident off-shore corporation in central bank statistics; the reclassification required the modification of all statistics and instruments. Moreover, data on local governments, recorded in the past in other sectors, had to be reclassified to the general government sector in the balance of payments statistics.

- The balance of payments statistics with the current breakdown and content has been available since the beginning of 1995. Therefore previous data on the rest of the world was produced through the reprocessing and supplementing of earlier internal documents and data. Prior to 1995, the database of the tax authority (APEH) contained much fewer items in connection with corporate balance sheets. The missing instruments were supplemented from the annual reports.
- Prior to the end of 1992, no APEH balance sheets were available on individual corporations; data was compiled from aggregated figures and the annual reports. Furthermore, no accurate interim data was available on government securities. We describe below data included in the financial accounts, the methods of retroactive revision and the creation of uniform time series for each module.

### *Balance sheet of the MNB*

This financial account module is prepared from the detailed balance sheet based on the records of the MNB. With the exception of securities held by the MNB and the rest of the world, it comprises the primary source of all central bank assets and liabilities (also in respect of counterpart sectors). Since the detailing of the statistical balance sheet has expanded on a gradual basis, secondary data sources were required for determining specific breakdowns and partial items, in relation to the period prior to 2001. In the period between 1989 and 1997, data on some items (insurance corporations, deposits of other financial intermediaries, employee loans and deposits, accruals, trade receivables and payables) originates from the general ledger or the annual report. Supplementary accounting data facilitates the breakdown of accrued interest according to instruments and sectors. From 2001, in addition to stocks, components

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of changes in stocks are also directly available (transactions, revaluations) with monthly regularity. Between 1997 and 2000, flow data was compiled from the monthly stock data of assets and liabilities in a foreign exchange breakdown. Prior to the above period, the periodical revaluation was calculated on the basis of the estimated foreign exchange composition. The flow data of shares owned by the state, on the liabilities side of the MNB, are produced under a separate procedure; the withdrawal of dividend and the raise in capital serving the filling up of reserves constitutes a transaction; all other changes in volume are revaluations.

### *Credit institutions*

In addition to data related to the rest of the world, the MNB and securities, this module serves as the source of all instruments of financial accounts, where the debtor or creditor sector is a credit institution. Data on particular securities other than shares is used from this module to the securities module for the purpose of additional calculations; data on shares and other equities held or issued by credit institutions are inserted into the unquoted shares module. Data of the credit institution module is generally based on the monthly statistical-supervisory balance sheet of credit institutions. Supplementary data is also available on the foreign exchange structure of specific assets and liabilities and the related revaluations. Since the summer of 2001, the introduction of new statistical sector classification, data collected on the balance sheets of credit institutions basically fully satisfies the data demand of financial accounts, as well. Prior to the above date, the breakdown of the balance sheets had been simplified from year to year, therefore the instruments of the financial accounts could only be produced with the support of an increasing number of estimates and supplementary information. In

2001, the largest breakthrough was achieved in relation to the expansion of the former private households category into the households sector, in accordance with the requirements of national accounts. Thus, the loans and deposits of individual businesses (partly with the help of supplementary data and partly with the use of earlier household estimates), classified under corporations, were to be transferred to the households sector for the preceding period. Similarly, prior to 2001, the loan and deposit items of non-profit organizations were divided among the sector of corporations, general government and non-profit institutions serving households. In certain periods, credit institution data relating to non-monetary financial corporations had to be divided according to the sector of other financial intermediaries, financial auxiliaries and insurance corporations and pension funds. Retroactively, the balance sheet of credit institutions indicated items of major amounts, with no related breakdown. Typical such items included deposit certificates and security type deposits, with no breakdown into sectors, which were earlier construed by statisticians generally as the assets of households, as well. Prior to 1998, the division of accrued interest according to counterpart sectors was similarly resolved through estimates. Between 1990 and 1992, the transferable accounts of counterpart sectors had to be split off short term other deposits with estimation. In addition to the clarification of instrument categories, estimates and calculations were also carried out for specific periods, due to the subsequent modification of the sector classification of certain institutions or groups of institutions. Thus, the time series presented the reclassification of money market funds into the sector of other monetary institutions (prior to 2003), the reclassification of CIB Közép-Európai Nemzetközi Bank as a resident (prior to 1997) and the new classification of certain corporations under central government.

### *Other financial corporations*

This module contains data used for financial accounts on other (non-monetary) financial intermediaries and financial auxiliaries. The creation of the common module was supported by the joint data sources of the two groups of institutions. Among other financial intermediaries, the assets and liabilities side of mutual funds are presented in the counterpart sectors and securities modules. For the above reason, the other financial corporations module includes the data supply of financial and investment corporations, the Student Loan Center (and KELER Rt. until the end of 2003) and the aggregated figures of the APEH balance sheet data on other corporations listed to the sector. Direct (supervisory) reports on financial and investment companies are unavailable for the period preceding 1999, therefore the data thereon was also retrieved retroactively from the APEH database. Data on corporations reporting directly on a quarterly basis covers 95 percent of the financial worth of other financial intermediaries, while roughly half of financial auxiliaries are covered (the sector is composed of many, very small firms). Data coverage for the module is completed with annual APEH data and the estimation of these. In the financial accounts, module data indicates loans extended to and drawn from other (non-financial) sectors, assets vis-à-vis each other among institutional units in the sector and other receivables and payables. All other instruments are provided by counterpart sectors and securities modules.

### *Insurance corporations, funds*

This module collects balance sheet data relating to insurance corporations, private and voluntary pension funds and health funds. The listed range of

institutions covers the whole of the sector. The module is the input source to financial accounts of data on loans provided by the sector, assets within the sector, other receivables and payables, and insurance technical reserves, constituting the prominent liability of the sector. Only such special financial intermediaries, insurance corporations and funds, are in the position to supply information on the data of such reserves, in a breakdown by types and holders, for these instruments are generally not recorded as assets by the holders. The various fund types were established in Hungary from 1994 and 1997; data on these is contained in the quarterly and annual reports supplied by the State Supervisory of Financial Organizations (PSZÁF). The MNB always possessed internal data on the insurance corporations, but the annual reports collected by the PSZÁF are also used as supporting information, in relation to this group of institutions.

### *Rest of the world*

The rest of the world module presents the foreign financial assets and liabilities of resident sectors, with the use of the balance of payments statistics. This module supplies data to the financial accounts on the assets and liabilities of residents vis-à-vis the rest of the world, with the exception of securities issued by residents (shares and securities other than shares) – the latter data is provided by the securities modules. The estimates and calculations performed in the securities modules are partly based on the flow and stock data arriving from the balance of payments. The establishment of correspondence with the balance of payment statistics is one of the principles during the compilation of financial accounts. From 2004, with the accrual accounting of interest and with the presentation of reinvested earnings the theoretical differences were eliminated between the two statistics, yet the

uniform content of time series in the financial accounts also necessitated the retroactive adjustment of data in the balance of payments statistics. The balance of payments statistics were prepared in a three sector breakdown until 1993, and a four sector breakdown up to 2002; the eleven sector breakdown, required in the financial accounts, was estimated on the basis of outside (balance sheet) information. Data on local governments (before 1997), ÁFI (before 1993), the Bős-Nagymaros loan (1995-1996) and the ÁAK loan (1999-2002) had to be reclassified to general government, and CIB reclassified into a resident bank, effective prior to 1997. Prior to 2004, accrued interest, prior to 1995, reinvested earnings, non-bank corporate loans and trade credits and advances had to be estimated in the statistics. In addition to stocks, transaction and revaluation data, other changes in volume regularly affect the balance of payments; some of which were successfully eliminated through the uniform arrangement of data.

### *General government module*

This module collects data relating to and originating from central government, social security funds, local governments and corporations classified under general government. The time series of assets within general government, loans provided by government units and other receivables and payables are used in the financial accounts. The estimation of taxes and contributions receivable, representing most of the other accounts receivable and payable is calculated through the accumulated difference between treasury cash-flow data and accrual data calculated with time adjustment of cash-flow data. In respect of other items, the balance sheet of budgetary chapters and corporations classified into the general government sector supply stock data.

### *Household module*

The MNB does not directly collect data on households; the financial accounts include time series originating from counterpart sectors, or calculated on the basis of residuals or external information. While other modules contain information on counterpart sectors, the household module contains items requiring separate calculations particularly linked to households, such as cash data, wages receivable and public services payable. The amount of HUF cash available to households is determined through the total issued amount (liability of MNB) less the assets of known holder sectors. The amount of wages receivable is determined on the basis of the monthly wage statistics of the Central Statistical Office (KSH) and the budgetary cash flow statements, with the estimation of amounts due for the period, but only paid in the succeeding month. The accounts payable of households are determined on the basis of the balance sheet data of major public service corporations (water, sewer, gas, remote heating, electricity, phone, etc.), through the consideration of price increases and the flow data of KSH.

### *Corporations and non-profit institutions*

This module contains data relating to non-financial corporations and non-profit institutions serving households. The joint handling of the two groups of institutions is due to the fact that annual data is available on both groups (from APEH and KSH), with nearly a one year lag, and similar estimates are made for the purpose of producing quarterly data. This module only provides financial accounts data on intercompany assets and the other receivables and payables of non-profit institutions; all other data on the two sectors is produced in other modules (counterpart sectors and securities statistics



sources). The range of estimated, extrapolated instruments can thereby be reduced to a minimum. Intercompany assets (other than securities) are linked to three types of instruments: loans, trade credits and advance payments and other receivables. Since the balance sheets of corporations do not include assets and liabilities in the breakdown of counterpart sectors, these instruments may only be produced as a residue. The calculation is based on the premise that the outstanding assets and liabilities of the corporate sector vis-à-vis external, other sectors (i.e. the consolidated financial accounts of non-financial corporations) may be covered with the other modules of the financial accounts. Thus, the intercompany items are produced through available data on the total loans and other receivables and payables that can be found in the periodical APEH balance sheets less external assets and liabilities. The estimation of data on periods (of maxim one year) yet to be covered by corporate balance sheets is performed on the basis of information of earlier years.

### *Government securities*

This module contains the financial accounts data on securities issued by central government (and the social security funds in the past). The data is recorded according to the classification of HUF bonds, foreign exchange bonds, treasury bills and compensation bonds. With respect to all types of securities, statisticians record the nominal value, issue price, market value and accrued interest, generally relying on the securities statistics of the MNB and the reports of ÁKK. For statistical purposes, from the end of 1992, the MNB records government securities (per securities) and the interest accrued thereon. However, the presentation of a breakdown with all the securities holder sectors and the market value was only enabled through the

quarterly securities statistics launched in 1997. Prior to the above date, quantities held by non-financial corporations were determined as residue on the basis of total outstanding stock and stocks at known securities holder sectors. Statisticians approximated market value by way of the nominal value (issue price) increased with accrued interest. Thus, in this period it was not possible to account revaluation; the total change in volume is indicated as transaction in the financial accounts. In relation to the years 1990-1992, revision was performed on the basis of the aggregated statements of the MNB and ÁKK and the issue and interest related features of securities outstanding at the end of 1992. Monthly issue and withdrawal data is available on compensation bonds from 1992, the beginning of their issue, supplied by the Central Claims Handling Office and ÁPV Rt. The financial accounts statistics record compensation securities as the long term liability of the central government (and the assets of households and the rest of the world), valued at stock market prices.

### *Bonds*

The module contains data on securities other than shares (securities incorporating a credit relationship) issued by residents, with the exception of government securities and securities issued by the MNB. Thus, data in this module typically relates to the aggregated stock and flow figures on corporate and bank bonds, deposit certificates, mortgage bonds, bonds of other financial intermediaries and local governments, and the bills of exchange of corporations and credit institutions, in the breakdown of holder sectors. From 1997, the data sources were based on the securities statistics of the MNB which only indicated securities issued by residents, deposited or held by the reporting unit, therefore (particularly in the beginning) such figures had to

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be completed in scope with the known aggregated (balance sheet) data which also served revision. For the time being, statisticians account accrued interest only on securities issued by credit institutions; corporate and other bonds are recorded in the statistics with nominal value due to their low value.

### *Quoted shares*

This module indicates quoted shares of resident sectors at market value, in the breakdown of shareholder sectors, with the exception of the amount of own shareholding. From the end of 1997, data is supplied by the quarterly securities statistics of the MNB. Prior to the above date, revision was performed on the basis of stock exchange reports and the APEH balance sheet data of quoted corporations. Other changes in volume frequently occur in periodical flows in relation to quoted shares, indicating introduction and withdrawal to and from stock exchange. The same figure is indicated with a negative sign in respect of unquoted shares. In relation to shares held by the rest of the world, in addition to purchase and sale flows, reinvested earnings also make part of transaction data.

### *Unquoted shares*

This module contains the stock and flow data of unquoted shares issued by resident financial and non-financial corporations, in the breakdown of shares and other equities, in the detail of issuer and holder sectors. The main source of data is the data of APEH balance sheets on shareholders' equity and subscribed capital, the latter in the breakdown of main shareholder sectors. In addition, the reports of institutions classified under financial corporations and general government, and the balance of payment statistics also supply data for the compilation of time series. For the time being, stocks are presented

in statistics at shareholders' equity (sometimes adjusted) value of the balance sheet. The annual stock and flow data, compiled from the APEH database, on unquoted shares and other equities are produced with complex calculation methods for each corporation and a breakdown of all issuer sectors. Such data is detailed with the support of secondary data sources available with a quarterly frequency, estimated on a quarterly basis and extrapolated further by statisticians. Beyond the APEH balance sheets, no other data sources offer information on the shares held by non-financial corporations and households; the even distribution of annual APEH data and the extrapolation of earlier trends enable the compilation of quarterly financial accounts. Between 1990 and 1992, in the absence of the APEH database, the calculation of backwards data was supported with the aggregated corporate balance sheets provided by the Central Statistical Office. The flow data on shares held by the rest of the world also includes reinvested earnings.

### *Mutual funds shares*

The module containing stock and flow data on mutual funds shares issued by resident mutual funds is based on the securities statistics of the MNB. Data in the module is in the breakdown of issuer (money market funds, other mutual funds) and holder sectors. In relation to the period prior to 1997, the estimates were prepared with the help of aggregated reports provided by PSZÁF, stock market prices and the household statistics available at the time at the central bank.

### **1.3.3. Compilation of financial accounts with individual instruments**

We discuss instruments below which are inserted into financial accounts from a sector level module.

The statisticians of financial accounts record data on securities issued by resident institutional units on an instrument level – these are described in the section on securities modules above.

### *Currency*

Domestic (HUF) and foreign currency are recorded separately in the financial accounts. The prior represents the debt of the MNB and the asset of any other sector, while the latter indicates the liability of the rest of the world and the asset of any resident sector. In practice, regular information is only available on the amount of HUF and foreign currency amounts held by financial corporations and general government. Only occasional assessments are made on the stock of HUF cash of non-financial corporations and households; these assist in determining the rate with the help of which the remaining stock – after the deduction of the stock held by other sectors – can be split between households and non-financial corporations. The total change in stocks of HUF cash is a transaction, excluding the outstanding amount of banknotes and coins withdrawn from circulation which are accounted as other changes in volume. There are no statements on the total amount of foreign currency held by residents. In the financial accounts, only the amounts kept by monetary institutions may be fully covered on the basis of the balance of payments statistics. The total amount of foreign currency held by households is an estimate.

### *Deposits*

Deposits may only represent liabilities of resident or non-resident monetary institutions (credit institutions, central banks) or general government organs (treasury). Transferable accounts and

other deposits must be separated in the financial accounts. In addition, in Hungarian statistics, other deposits kept at resident monetary institutions and the rest of the world are further broken down into short term and long term deposits. Other (time) deposits also include accrued interest. Institutions classified in the scope of the treasury must keep accounts at the Hungarian State Treasury, these being budgetary organs, certain non-profit institutions and special corporations (e.g. Student Loan Center). The financial accounts only include the accounts of institutions (social security funds, Student Loan Center) outside of central government, on the basis of data supplied by the Hungarian State Treasury; the presentation of the accounts of organs and institutions classified under central government would cause an unnecessary accumulation of data within the sector.

### *Loans*

Theoretically, any sector may draw loans from any other sector. In practice, however, it is possible to determine the dominant creditor and borrower sectors. This is important because many data sources are unable to clearly isolate loans from other assets and liabilities, therefore in some cases, the classification of an instrument is based on presumptions. In general terms, financial auxiliaries, insurance corporations, various funds and non-profit institutions provide and draw loans to a limited degree. Information is limited on the loan assets of households. The other items (which are not securities or other equities) of the balance of payments statistics, indicating the receivables and liabilities of resident sectors vis-à-vis the rest of the world, are deemed by the statisticians of financial accounts to be loans, following the exclusion of identified deposits and trade credits. The

statistics present loans at a value increased with accrued interest.

### *Insurance technical reserves*

This instrument includes the special assets and liabilities of resident insurance corporations and funds outstanding vis-à-vis resident insured sectors and the rest of the world. The life and pension insurance reserves comprise household assets; other insurance technical reserves may be the financial assets of any sector. The breakdown by sectors may be determined and estimated retroactively on the basis of the reports of insurance corporations. Reinsurance is common in certain insurance branches and at insurance corporations. Typically insurance associations turn to resident insurance corporations, while the latter turn to foreign insurance corporations for the purpose of reinsurance. Thus, the statisticians of financial accounts decided to present the gross figure of technical insurance reserves in relation to the primary insurance corporation, therefore the primary insurer has ties to the (mainly non-resident) reinsurance corporation. There is no information available on the insurance technical reserves of resident sectors arising from direct insurance policies with the rest of the world, for these transactions are conducted outside the resident insurance corporations supplying the data.

### *Other receivables*

Other receivables and payables comprise perhaps the most complex instruments of the financial accounts; information is wide ranging in relation to some sectors, but the figures are difficult to incorporate in the statistics, while data is scarce in respect of other sectors. Since other receivables and payables are not residue items in the financial

accounts which would have the simple function of equilibrating the balance sheet, but rather strictly serve the enforcement of accrual accounting, the financial accounts only include items of identified content, which are drawn from various data sources (balance sheets). Accrued interest, constituting other receivables, payables, as reported by data suppliers, are included in the value of interest bearing instruments (deposits, loans, securities). The statistical methodology arranges other receivables and payables in the breakdown of trade credits (accounts payable, receivable) and other items. The separation of trade credits from accounting products is generally a straightforward process. In relation to other items, however, main components had to be defined in relation to which data included in the financial accounts may be calculated on the basis of uniform principles and data sources. Thus, receivables and payables linked to taxes and contributions similarly derive from general government sources, and statisticians keep separate records on receivables and payables related to wages. Other identified items commonly reported by financial corporations include items in transmission, advance payments, or deposit-type receivables recorded by non-monetary financial institutions.

### **1.3.4. Items requiring special accounting**

#### *Valuation of unquoted shares*

Pursuant to rules applied to the compilation of national accounts, all instruments must be recorded in the accounts and balance sheets at market value. However, in respect of instruments not traded on markets, particularly unquoted shares and other equities, the “market value” may only be estimated and approximated. The stock data of financial

accounts on shares issued by non-residents and held by resident sectors (shares, other equities, mutual funds shares) is partly derived from flows (data from balance of payments statistics) and partly from balance sheet data with book value or market value (from balance sheets of different financial corporations). Data on unquoted shares and other equities issued by resident financial and non-financial corporations is derived from the shareholders' capital of corporations applying double entry and single entry accounting and the real estate investments of the rest of the world. (According to the methodology, only financial assets may be held in the rest of the world, therefore the statistics establish an imaginary corporation for the real estate, the other equities of which are held by the non-resident investor.) Data of the prior two groups is comprised of the stock of (adjusted) share capital originating from the balance sheets of resident corporations, while the latter group is recorded in financial accounts with stocks accumulated from (real estate share) flows (in accordance with the data source, the balance of payments statistics). Detailed data on individual corporations are available in relation to resident corporations applying double entry accounting; the adjustment of shareholders' capital at book value is possible in this instance, as well.

Adjustments effected in respect of the shareholders' equity of corporations applying double entry accounting are as follows:

- Consideration of approved dividend
- Increase of negative shareholders' equity to zero (for shareholding companies, limited liability companies)
- Consideration of transaction value significantly differing from shareholders' equity value

Dividend approved by shareholders does not comprise part of shareholders' equity in the accounting balance sheet (since 1992), for at the

end of the business year, it is transferred from profit to liabilities vis-à-vis shareholders. In statistics, however, dividend is transformed into shareholder income by way of the shareholders' decision; until such decision, it must be recorded in the value of the share, i.e. it is added to the value of shareholders' equity and transferred from such item in the succeeding year (generally in the second quarter), if approved with voting. The payment of dividend reduces the value of shares and other equities (normally) in the form of depreciation or in the form of transaction (payment of dividend is deemed capital withdrawal – a transaction – upon the accounting of reinvested earning). It is difficult to interpret negative assets, commonly arising in consequence of the negative shareholders' equity of corporations, in the context of financial account statistics. The problem is to a major extent remedied if the negative shareholders' equity of companies operating with limited shareholder liability (shareholding companies, limited liability companies) is replaced with a zero in the statistics; this is warranted because in relation to such companies, the shareholder is not obliged to contribute assets in excess of the value of share capital (the remainder amount of loss encumbers the creditors). Statisticians apply a third adjustment option in special cases, in which an observed transaction (single market event) is linked to a share or other equities which differ significantly (by tens or hundreds of billions HUF) from the book value. In such cases, the amount of the difference is gradually added to the value of shareholders' equity from the beginning of the event (up to the availability of new price information), thereby enabling the approximation of the market value.

State-owned companies were commonly transformed in Hungary into business organizations between 1990 and 1996. The transformation process involved the valuation of assets and the

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creation of new balance sheets. In the framework of the above, the value of tangible assets (recorded at previous historical cost) was typically increased, and the arising difference contributed to subscribed capital. Thus, the shareholders' equity of companies following transformation well approximated market values, but the book value of the amount of shareholders' equity relating to the period prior to economic transformation was significantly increased in the statistics (for the purpose of establishing the consistency of time series). Consequently, in the initial years, the stock of corporate other equities in the financial accounts was recorded with a HUF 500-600 billion (over 20%) higher value than the amount of shareholders' equity increased with profit in the aggregated corporate balance sheets.

### *Main events presented with other changes in volume*

Other changes in volume are generally recorded in financial accounts in relation to the changes in ownership type (other equity to share, unquoted to quoted shares), changed sectors of institutions or the modification of valuation rules. The latter case is exemplified by the modification of the calculation of foreign exchange rates applied by the central bank in the beginning of 1997: conversion to market exchange rates resulted in lower stocks converted to HUF, indicating negative other changes in volume in relation to the affected instruments. With regard to the prior cases (change of instruments and sectors), the reclassification does not affect the whole of the financial worth, but only its composition, therefore both items (origin and target of classification) indicate another change in volume, in a corresponding amount, but with opposite signs. The change in instruments resulting from the modification of corporate form (other change in volume of non-share

equities/shares) is generally recorded by the statisticians in relation to non-financial corporations in financial accounts. In the early 1990s, in the period of mass corporate transformation, hundreds of billions of HUF in other equities (totaling over HUF 2,000 billion) were transformed into shares. In respect of financial corporations, statisticians attempted to avoid the indication of other changes in volume as the change in corporate form through the retroactive revision of the future (corporation) form. For example, among credit institutions, in all cases only the shareholders' equity of co-operative credit institutions is indicated as a other equity.

### *Termination of old, preferential home loans*

In early 1989, the government introduced measures targeting the termination of preferential home loans (with roughly 3% interest) which had been drawn up until 1988. The Home Fund was established as an extrabudgetary fund which formally assumed the affected loans from OTP (National Savings Bank) and the savings co-operatives, providing in exchange its own issued bonds in a corresponding amount, but with a market interest rate. As the next phase of the process, from the beginning of 1991, the state provided incentives for the partial repayment of the loans by way of canceling the outstanding amounts; which most households took advantage of. The Home Fund was terminated in 1992; the Home Fund bonds outstanding at credit institutions, corresponding to the amount of canceled loans (including the interest margin), were transformed into government bonds (becoming part of government debt). Thus, in 1988, the government decided on modifying the terms of home loans, but most of the arising losses are presented in the national accounts only in 1991 or 1992, due to the applied scheme. In the

course of statistical processing, the classification of the Home Fund into a sector was problematic, for as an institutional unit, in a statistical sense, it should be classified under general government which, in turn, causes discontinuities in the time series of financial accounts. For this reason, a solution was approved (analogous to the current home purchase support system), whereby the home loans with preferential interest rates remained in the balance sheets of credit institutions, and it was not necessary to consider the Home Fund and the bonds it issued. (Statistics always consider preferential loans as provided with market interest rates; the state supports households with the difference of the interest rate, and the latter pay market interest rates to credit institutions.) By way of this method, however, the cancellation of the loans in 1991 would represent the loss of the banks which would only be reimbursed by the government in 1992 through the allocation of government bonds. For the purpose of remedying the above timing problem, the credit institutions receive the government bonds in 1991, according to the schedule of loan cancellation, thus, the transfers provided to households are directly presented in the rise of the budget deficit and government debt.

### *Presentation of debt-, loan- and bank-consolidation in the statistics*

In 1987, during the establishment of the two tier banking system, the three credit institutions demerged from the central bank inherited the corporate clients of the central bank, jointly with their bad liabilities (roughly HUF 10 billion). In the succeeding years, the commercial banks continued automatic lending to state-owned companies. According to estimates, by 1990, the stock of bad debts rose to the amount of HUF 30 billion, and the

state assumed a guarantee for the amount of HUF 10.5 billion. By the end of 1992, the stock of such debt grew at a considerable rate as a result of the collapse of Eastern European markets, to exceed the amount of HUF 100 billion. At this point, the government assumed HUF 102 billion from the affected banks, and in 1993, it assumed an additional HUF 62 billion in corporate loans. In the following years, the government succeeded in collecting only a fraction of the assumed loan debt, thus, these figures are deemed insignificant from a statistical point of view. In this sense, the state assumed and also cancelled the loans of the affected companies, as presented in the financial accounts at the turn of 1992-1993, in parallel with the government bonds allocated to the banks. At the end of 1993 and the beginning of 1994, several credit institutions received government bonds due to their low capital adequacy, such bonds primarily serving the increase of shareholders' equity, and to a lesser extent, these were booked as subordinated loans among government receivables. This series of transactions – termed as bank consolidation – also contributes to the rise in the share and loan assets of central government in the financial accounts (indicating a total amount of roughly HUF 130 billion, corresponding to the value of provided government bonds) vis-à-vis credit institutions.

### *Special statistical processing of Postabank and Magyar Fejlesztési Bank*

It is almost impossible to devise accounting solutions in the framework of national account statistics which enable the retrospective settlement of the amount of government subsidies for the period of the incurrance of bank losses because the financing of subsidies would require the input of liability elements (issue of government securities)

which did not (yet) exist in that period. The statistical methodology only supports the reclassification and reassessment of existing instruments and transactions, thus, the partial consolidation of Postabank was implemented in the financial accounts. Of the bonds of Reorg Apport Rt., purchasing the bad assets of Postabank, HUF 25 billion was reclassified as government bonds from the end of 1998. Thus, the government subsidies provided to the company in 2001 constituted a repayment of bonds. By way of the transfer of the bonds in 1998, Postabank received government subsidies in the statistics. As a result of recapitalization at the end of 1998, the state became a Postabank shareholder in the value of HUF 40 billion which is also indicated in the financial accounts as share purchase. Additional amounts received from various institutions (social security local governments, ministries, ÁPV Rt., MFB Rt.,

etc.) under the title of an increase in capital were accounted as subsidies in the course of 1997 and 1998.

In 1999, government decisions modified the responsibilities of MFB Rt.; the bank joined in state motorway construction projects (NA Rt., ÁAK Rt.), and later, the financing of the purchase of other equities of agricultural co-operatives (Üzletrészhasznosító Kft., CASA Kft.). In the period 1999-2002, the state funds received by MFB Rt. for the increase in capital were not posted through the bank; its assets side does not include these shares (reclassified to central government), and shareholders' equity on its liabilities side does not change, either, in the financial accounts, as a result of the state capital injections. Of the major government subsidies received at the end of 2002, roughly HUF 80 billion was classified by statisticians as share purchase.



## 2 Analyses





## 2.1. Analyses according to sector

### 2.1.1. Financial accounts of households

In relation to the household sector, the MNB has been publishing data on financial investments since the early 1990s. Up to the beginning of 2003, such information was published independently, with monthly regularity. From the spring of 2003, statements on households were incorporated in the consistent system of the financial accounts of the total economy, published jointly with the other economic sectors, with consistent form and content. Simultaneously with the above process, uniform time series are available, even on a retrospective basis, and discontinuities have been eliminated which affected household data earlier, due to the changes in methodology.

#### *Net lending/net borrowing*

The net lending/net borrowing is the chief indicator of financial accounts, indicating the amount at which the examined sector is able to finance other sectors with current income, in excess of its consumption and accumulation expenditures. The net

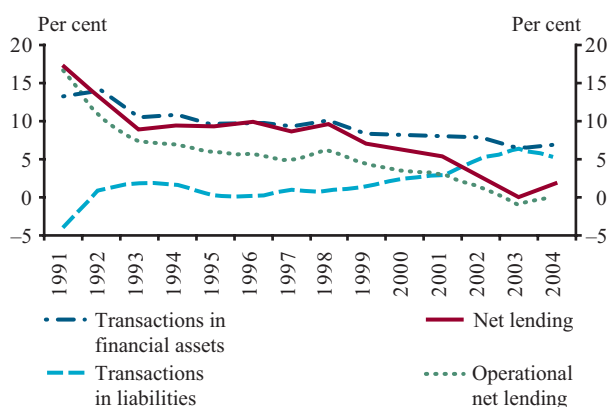
lending of households had undergone major changes in the past years (see Chart 2-1). The value of the indicator reached 17% of the GDP in 1991, falling considerably in the succeeding two years, to reach roughly 9-10% up to 1998; in the following years, the rate decreased on a gradual basis. The figure reached a bottom value in 2003: the GDP-proportional net financial investments of the household sector reached 0.1%. Since net lending calculated in financial accounts is determined by changes affecting two factors – financial assets and liabilities – the trends are explained with changes related to the above two components.

At the beginning and end of the examined period, the changes in the liabilities of households, i.e. basically the increase-decrease in the amount of their loans, provide a rather varied picture on the general trends featuring the period. In 1991, the debts of households decreased considerably as a result of the government transforming old, preferential home loans. It remitted half of the loan debt of households which were ready to repay the outstanding amount of the loan in a lump sum, or approximated the interest rate to market interest rate levels. The remission of the loans, in itself, contributed to a high rate of net lending by 1991, through the reduction of loan stocks with transactions. The same trend is presented in the non-financial accounts as government transfer provided to households, similarly increasing the balance of households.

From 1999, however, the outstanding amount of loans of households began to rise. Initially, demand increased for consumption loans. From the year 2000, the amount of real estate loans also took an upward turn, reaching high levels in connection with the expansion of preferential home

**Chart 2-1**

**Net lending of households as per cent of GDP**



Source: MNB.

loans to include the purchase of not new-built homes. The higher level of real income, the expected level of income and the marked fall in the interest rate of real estate loans motivated the households to increase accumulated expenditures with future interest burdens. In five years, the GDP-proportionate rise in the rate of loans arising from household transactions increased from 0.6% to 6.2%.

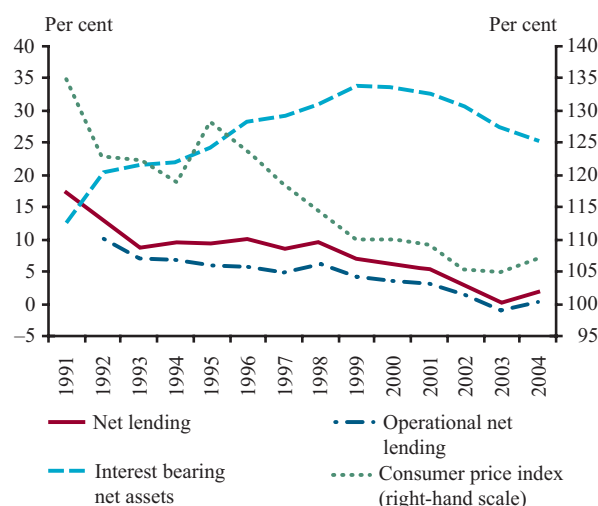
The other component determining net lending, transactions in financial assets, basically revealed trends contrary to the direction of the above changes. The rate of the annual net purchase of financial assets fell from 13-14% of the GDP at the beginning of the period to 10% in 1993, which is linked to the reduced rate of deposits. In comparison to the 6-7% rise in the rate of deposits in the previous years, from 1993, deposit transactions generally reached 4% of the GDP. The volume of transactions in financial assets decreased once again from 1999 at a moderate rate, primarily as a result of the falling trend in the purchase of shares and securities other than shares.

The above trends were reversed in 2004. At the end of 2003, government interest subsidies were curbed in relation to home loans; consequently, the GDP-proportionate net borrowing of households fell below the value for the previous year. The falling trend in net acquisition of financial assets also halted, primarily as a result of a rising trend in the purchase of securities other than shares. Upon the effect of the above trends, in 2004, the GDP-proportionate net lending of households reversed the falling trends of the previous years and indicated growth.

In parallel with the above, it is expedient to examine the difference between nominal and operational net lending. The operational indicator serves to exclude from nominal transactions the compensation for inflation incorporated in interest rates,

the amount of which increases the financial investments only because due to high inflation, high nominal interest rates are incorporated in the stocks to set off the above effect. Thus, the difference between the two indicators is the function of two factors – the amount of interest bearing stocks and inflation. Both factors bear a positive impact on the difference; if any one of these increases, the difference is also greater, and vice versa. This correlation is best illustrated between 1993 and 1996, and 1999 and 2003 (see Chart 2-2). In the prior period, namely, in parallel with the (GDP-proportional rate of) interest bearing stocks, the rate of inflation also took a marked rise, entailing the 1.1 percentage point rise in nominal net lending and the fall in the operational indicator at the same rate. In the other period, the two indicators began approximating each other as a result of the falling rate of interest bearing stocks and the rate of inflation.

**Chart 2-2**  
**Net lending of households (as per cent of GDP)**  
**and consumer price index**



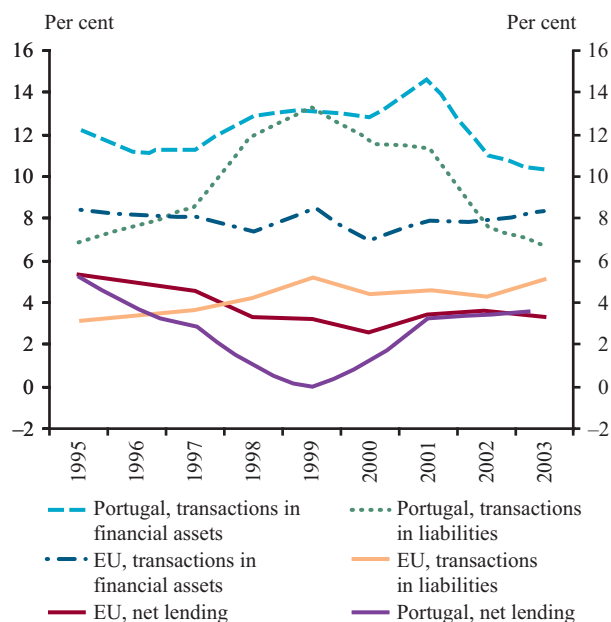
Source: MNB, KSH.

Up to the year 2000, the change in the GDP-proportional rate of the net lending of households was not considered low in international comparison; it exceeded the rates of EU countries. This was the

trend only because the rate of household loans did not rise in excess of the growth rate of the GDP. In EU countries, the rise in household liabilities originating from transactions corresponds to 3.5% of the GDP, albeit there are major differences in specific members states (see Chart 2-3). The rise in the rate of borrowing was higher than average in Portugal, Spain and Denmark, for example, where borrowing increased fast, on a temporary basis in 1995-1999 (transactions in liabilities grew by 4-6 percentage points, reaching 8-12% of the GDP). Consequently, net lending in these countries fell to zero in proportion to the GDP. In the following years, the borrowing rate fell back to previous levels, and net lending simultaneously reached average EU levels.

**Chart 2-3**

**Net lending of households in EU and in Portugal**  
(as per cent of GDP)



Source: Eurostat.

### Structure of financial assets

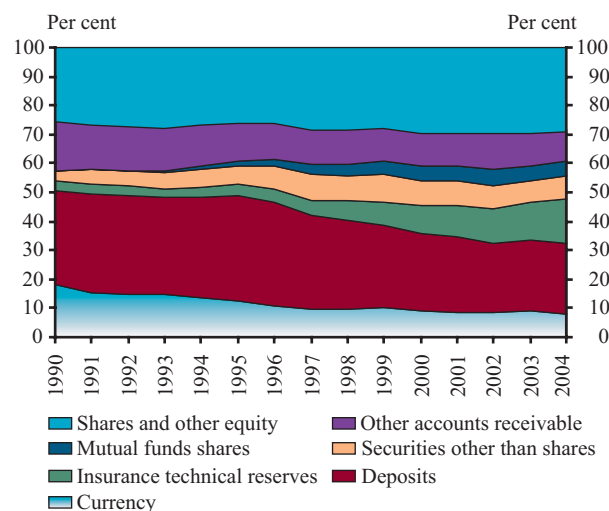
In the past 13 years, major changes affected the portfolio composition of the investments of households, shaped by the development of the money

and capital markets and a changing legal environment. There were few investment opportunities at the beginning of the period. The role of non-banking institutions (insurance corporations, pension funds, mutual funds) was enhanced in relation to the forms of financial investments offered to households. The expansion of the selection of financial instruments, the introduction of government securities, mutual funds shares, life insurance and pension funds gradually reduced the role of banks in managing the financial assets of households. The portfolio composition of household financial instruments was further widened by way of the purchase of privatized shares, public issue of consumer bonds by the brokerage firms of banks, and the acquisition of shares in companies.

At the beginning of the 1990s, roughly 50% of the financial assets of households were composed of cash and bank deposits; 25% of these were linked to shares and non-share equities, and 7% of such assets comprised investments in securities other than shares and insurance technical reserves. The structure of savings was transformed, whereby the role of cash and bank deposits was gradually reduced among financial investments (33%), the

**Chart 2-4**

**Composition of households' financial assets**



Source: MNB.

rate of shares (shares and other equities) held by households rose at a moderate pace (30%), and the rate of other elements in the portfolio of financial investments rose considerably (see Chart 2-4). Shares, beyond mutual funds shares, are included in the portfolio of households at a relatively stable 30% rate (in the financial accounts, mutual funds shares are also linked to this instrument, but these are indicated separately above). Within the above value, the non-share (other) equities worth of households is dominant, corresponding to approximately four times the rate of share worth. In addition to non-share equities in co-operatives, households gradually increased their holding of non-share equities by way of capital increases and acquisitions; presently, households hold an over 50% share of non-share equities issued by companies not operating in the form of a shareholding company. At the beginning of the 1990s, households typically made net purchases; the central government gradually sold off its assets, in parallel with the establishment of private ventures. Once more major transactions were effected in 2000, due to the share capital increase requirement stipulated by the amendment to the companies act. Among shares, primarily quoted shares are linked to an organized market; the price of these can be effectively measured – households purchase these for investment purposes. Households expanded their portfolios with these financial instruments at the highest rate in 1996-1998. The above trend is associated with the purchase of privatized shares which were offered with favorable payment conditions. The stock exchange flourished in this period, stock prices rose, until prices took a steep fall in 1998, following the Russian crisis, reducing the rate of household investments in quoted shares. The rate of quoted shares in the financial assets of households was highest in 1997, with 5%; presently, the

figure is 1%. Thus, the rise in the rate of shares is primarily related to the growth in unquoted shares and non-share equities.

Up to 1999, the rate of securities other than shares among the financial assets of households increased at the highest level. At the beginning of the period, the household sector purchased deposit certificates issued by banks, while securities reserved a gradually growing rate of the household portfolio. With the enhanced role of non-bank financial intermediaries, however, the participation of households in direct financing of the general government, the purchase of securities has subsided in recent years.

The most prominent development is related to investments into insurance and pension fund reserves. Following the elimination of the monopolistic position of the insurance market, the establishment of voluntary pension funds (in 1994) and private pension funds (in 1998) promoted a form of investment witnessing the highest growth rate on the domestic market; its rate has risen from 4% to 15%. The higher rise is indicated by the reserves of pension funds, firstly, due to the mandatory nature of private pension fund payments, and secondly, because the membership fees of voluntary funds are supplemented with higher employer's contributions. Insurance technical reserves represent long term investment serving self-support purposes; investors may not change intermediaries prior to the maturity date, or only at the price of losses. The investment policies of institutions are generally determined by statutory regulations; there are relatively few options for creating various investment portfolios. Nevertheless, demand for such instruments has been increasing in recent years. Among life insurance premium reserves, the rate of life insurance bound to an investment unit has grown on a gradual basis; the investor is offered the opportunity of selecting portfolios involving variable risks.

In addition to insurance companies and pension funds, mutual funds deal with financial intermediation. Initially, closed-end funds were established with three year maturities; this form of investment was also promoted by the offered tax benefit. Later, open-end funds were established which may vary (bond, share, money market, real estate funds) according to the investment risk involved. Household portfolios primarily include government securities and money market funds which involve moderate risks. The rate of mutual funds shares among the financial instruments of households grew steadily up to 2002 (to 6%), followed by a major fall in these stocks in 2003. The above change is related to two factors: firstly, the stocks were revaluated due to the change in prices, secondly, with the rise in market yield levels, households withdrew a large amount of capital from the bond and money market funds. In 2004, the withdrawal of funds by households from mutual funds halted and the rate of mutual funds shares in their portfolios increased once again, yet such rate among total instruments decreased further (to 4.7%).

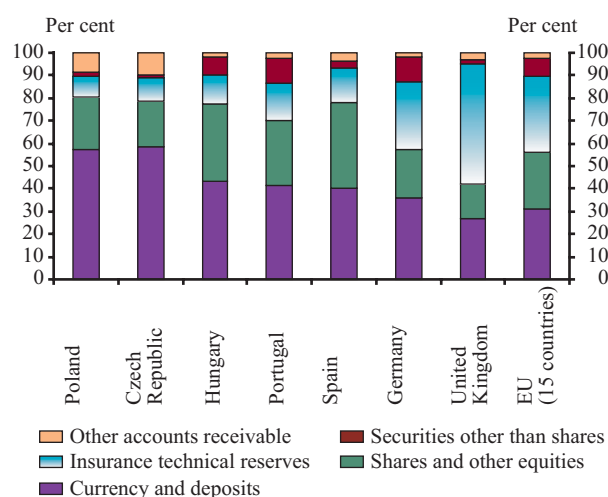
The rate of cash within the financial assets of households basically remained unchanged in the past five years (8-9%), since with a falling inflation rate, losses on cash stocks were reduced, moderating the motivation to select other forms of investment.

When comparing the structure of financial assets to the one applied in EU countries, two marked differences may be established. Firstly, the rate of insurance technical reserves (household receivables vis-à-vis insurance corporations and pension funds) in EU states is much higher (33%), secondly, the rate of cash and bank deposits is lower (30%) than in Hungary (see Chart 2-5). The composition of the investments of Hungarian households has basically shifted in the above

direction; the role of bank deposits and cash has been gradually reduced to the benefit of insurance technical reserves. Less developed EU countries (Spain, Portugal), however, indicate investment portfolios very similar to the Hungarian one, while among new EU members, the rate of deposits and cash is very high – 58% – in the Czech Republic and Poland.

### Chart 2-5

**Composition of households' financial assets in selected countries (2003)**



Source: Eurostat.

### Structure of debt

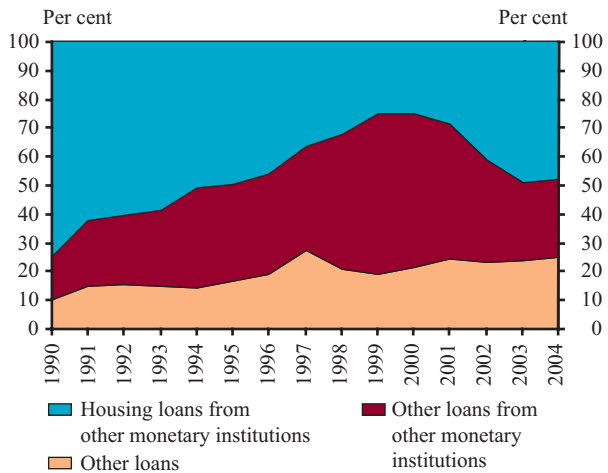
At the beginning of the 1990s, the interest terms of interest-free or low interest home purchase and building loans began to approximate market rates, and new loans were mostly offered with market interest rates. Banks introduced securities loans, motor vehicle financing and financial corporations (primarily leasing companies) expanded crediting activity. Currently, the liabilities of households are typically represented by debt owed to banks, but financial corporations play an enhanced role in crediting to households (see Chart 2-6). The rate of non-bank loans reached roughly 10% at the beginning of the period. The figure rose gradually in the recent period and now reaches 25%. At the

beginning of the period, the instrument was represented by employee loans provided by employers; from 2000, the crediting activity of leasing companies grew at an intense pace, and from 2001, the introduction of the student loan scheme also promoted the role of non-bank crediting.

At the beginning of the period, most of household debt was related to real estate loans. This is based on the fact that prior to the country's transition, the purchase of homes comprised the main form of investment for households, supported with subsidized loans with low interest rates. In the course of economic transformation, the economy of shortages was wound up, the supply of goods expanded, and the structure of consumption was gradually transformed. The structure of the stock of loans also changed on a gradual basis; by 2000, the rate of consumption and other loans reached approximately the rate of 75%. We should note, however, that the net borrowing levels were quite low; the rise in liabilities arising from transactions reached roughly zero percent of the GDP. The visible change in the structure of crediting followed. The consumption of households and the drawing of consumption loans grew at a prominent rate in the past five years. The rate of real estate loans increased at an even greater pace in connection with the introduction of subsidized credit facilities. The rate of such loans within the debt of households has, thus, increased considerably, currently reaching roughly 50%. In 2004, the rate of foreign exchange based loans has grown. Foreign exchange loans, offered with low interest rates, are provided in relation to both consumption and home loans. The government interest subsidies were curbed in December of 2003, thus the foreign exchange based real estate loans of households substitute part of the government subsidized loans. The rate of the per capita stock of household liabilities and receivables reveals major differences

**Chart 2-6**

**Composition of households' liabilities**

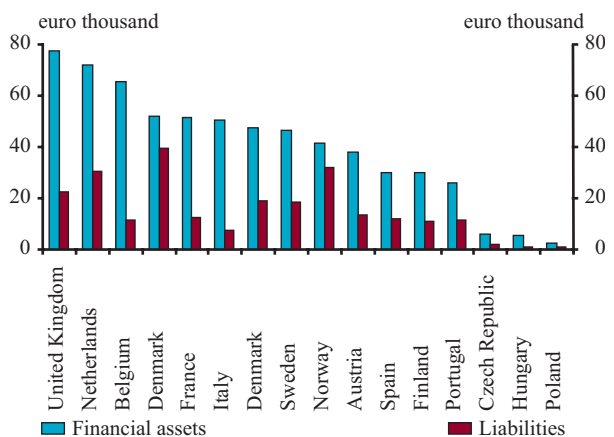


Source: MNB.

in the countries of the European Union (see Chart 2-7). In Hungary, the per capita average of financial assets is significantly less than figures produced in EU countries, and the situation is similar in relation to debts. Among the recently acceded EU countries, with the comparison of the Czech Republic and Poland, the stock of per capita financial assets is roughly similar in Hungary and the Czech Republic (5.3 and 5.8 thousand euro). The per capita average of debt (1.2 thousand euro) is lower in Hungary than in the Czech Republic, where the figure is 1.8 thousand euro.

**Chart 2-7**

**Households' financial assets and liabilities per capita in EU and in accession countries (2003)**



Source: Eurostat, MNB.



### 2.1.2. Net lending/net borrowing and financial worth of general government

General government sector comprises one of the main sectors of national accounts, presented by the statistics as divided into three sub-sectors (central government, social security funds, local governments). The fundamental indicators of general government revealed in the financial accounts are the balance measured on the financing side (net lending/net borrowing), the financial worth and debt. The financial account statistics contain all financial assets and liabilities of general government and its sub-sectors, valued at market value, if possible. For the purpose of producing the national debt indicator at nominal value – not typically a category of national accounts – from the financial account statistics, liabilities classified under debt (deposits, securities other than shares, loans) must also be recorded at nominal value. We describe below the financial position of general government with the use of data provided by financial accounts. Thus, the balance (deficit) of

general government is produced by the transactions of financial assets and liabilities, and not the difference between the revenues and expenditures of general government. Reasons for an emerging deficit are difficult to explain, for – with the exception of interest income related to interest bearing financial instruments – the issue may not be approached on the basis of financial accounts. The deficit (net borrowing) is an attribute related to financial accounts; only the financing of the deficit may be indicated: the financial assets sold or liabilities (debts) assumed to cover the deficit.

#### Deficit and its financing

The financing of the deficit is possible through the reduction of financial assets (sale of shares, withdrawal of deposits, recovery of loans provided) or the increase in liabilities (assumption of debt or other liability). In the long term, the deficit may be financed with the assumption of debt (drawing of credit, issue of securities), for other liabilities only comprise temporary items representing adjustments in time, and

**Table 2-1**

**Comprehensive figures on financing of general government sector**  
(links between government deficit and changes in debt)

	billion HUF														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Net borrowing deficit	-24	227	213	454	556	541	337	490	855	685	387	658	1616	1346	1315
Changes in debt of which: <i>revaluation transactions</i>	118 -2	545 10	413 11	879 -2	685 -3	1001 84	173 -39	391 242	778 260	716 106	362 147	623 -156	1622 -68	1409 240	1296 -236
Transactions in other liabilities	120	536	401	881	688	917	212	148	518	610	215	778	1690	1169	1533
Transactions in financial assets of which: <i>acquisition of shares</i>	24	10	10	-4	44	-5	11	12	26	-93	-51	269	-199	59	90
<i>net lending of loans currency, deposits</i>	167	319	199	424	176	371	-114	-329	-311	-169	-223	389	-125	-118	307
	65	245	53	299	202	166	47	-428	-147	-245	-42	169	165	-114	-181
	-4	-46	41	-28	2	-13	-7	44	-48	-7	-56	-20	-1	-42	93
	70	118	58	83	-54	187	-164	-50	-142	170	-101	237	-310	34	225

Source: MNB, financial accounts.

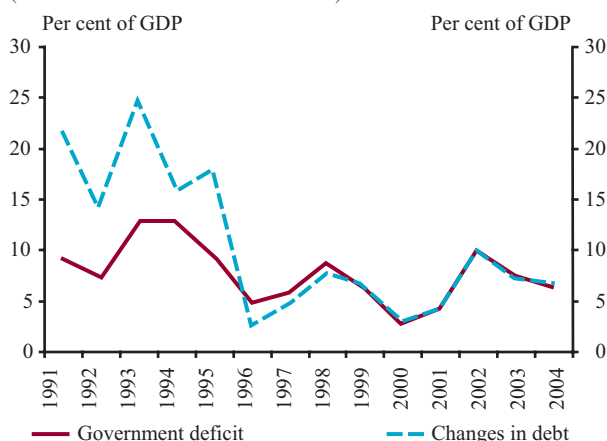
financial assets are not available in unlimited quantities to ensure the long term satisfaction of the net borrowing requirement.

When examining the statistical data on general government between 1990 and 2004, numerous forms of deficit financing are observed, and the balance also reveals varying trends (see Chart 2-1). The national account based deficit – the net borrowing – was largest in 1994, 1998 and 2002; it regularly decreased in the interim first two years, and grew for two years. From 1996, the rise in annual debt moved in line with the amount of the deficit. In the preceding years, however, the rise in the amount of debt was much greater than warranted alone by the financing of the deficit (see Chart 2-8). This is related to the fact that up to 1995, the assumption of liabilities partly served the accumulation of financial assets; the amount of deposits increased significantly, and the shares of general government also grew by way of the establishment of companies and the increase in capital. The debt due to forint valuation changes, not related to the financing of the current deficit, comprised a typical such item up to the end of 1996; changes in this item are indicated in the financial accounts vis-à-vis the capital increase of the government in the MNB. (The next section discusses this issue in greater detail.) As a general trend, in years in which the deficit peaked, the rise in debt was insufficient in itself to finance the deficit; it was accompanied with a high amount of deposit exhaustion which was supplemented by the government in the succeeding years (with the exception of 2003). As of 1996, the accumulation of financial assets was substituted with their reduction; capital investments were replaced by privatization transactions in high amounts. The assets side of the general government balance sheet was thereby included in the financing of the deficit, therefore

annual liabilities were assumed at a lower amount than the deficit between 1996 and 2000.

### Chart 2-8

**Annual government deficit and changes in debt**  
(measured in financial accounts)



### Role of the central bank

The net lending/net borrowing of the Hungarian general government is difficult to interpret without an understanding of the financial relationship between the central bank and the state. The above premise is based on the fact that up to the early 1990s, the MNB almost exclusively financed the central budget, and consequently the larger portion of national debt was assumed by the central bank until 1997 (see Chart 2-12). While the MNB accumulated foreign debts in foreign exchange, it lent to the government and state-owned companies in Hungarian forints – the debts of the latter were eventually assumed by the state. In consequence of the regular devaluation of the HUF, the bank incurred revaluation losses which it presented in the balance sheet in the form of a special financial instrument from the end of the 1980s. In 1989, this growing amount of “credit”, with no maturity and zero interest, was recognized as government debt (zero interest debt). For the purpose of managing this special financial relationship, numerous economic analyses unified

and consolidated the central bank with general government, enabling the direct analysis of the effects of foreign exchange debts. The problem was essentially resolved through the debt swap implemented between the MNB and the state at the beginning of 1997. In the framework of this procedure, zero interest debt was cancelled, and the foreign debt of the MNB, owed to the state, was indicated in the form of foreign exchange loans, serving as the basis of receivables outstanding vis-à-vis the state.

Since general government comprises an independent sector in the financial accounts, the consolidation of it with the central bank – also representing an independent sector – is not purposeful from a statistical point of view (bank assets and liabilities not linked to general government would also be included), therefore another method was to be selected for presenting the period preceding 1997. The concept was motivated by the fact that in 1999, special revaluation reserves were created on the liabilities side of the central bank's balance sheet which substantively behave similarly to zero interest debt: assets and liabilities outstanding in foreign exchange serve the balancing of revaluation at different rates (balancing the two sides of the balance sheet). The government had to fill up these reserves on several occasions (in 2001 and 2002, the strengthening of the HUF caused revaluation losses due to the high amount of international reserves) which was settled by the central bank as a state capital increase. (These transactions cause temporary discontinuities in 2001 and 2002 in the time series of negative asset transactions, indicating the sale of shares (see Chart 2-1). The same technique was applied in relation to the years preceding 1997: the revaluation loss was represented by the depreciation of MNB shares in the financial accounts which was regularly supplemented by central government in

the form of capital increase. The funding of the above procedure was provided for with loans drawn from the central bank – the zero interest debt (see Chart 2-10).

### *Financing using the assets side*

In the examined period, the value of the consolidated financial assets of general government (vis-à-vis other sectors) fluctuates between HUF 3,500 billion and HUF 4,000 billion. Shares (shares, other equities) represent the highest rate of financial assets, but their volume is steadily decreasing; the stock of shares amounted to HUF 2,623 billion at the end of 2004. Of the above amount, the value of quoted shares reached HUF 384 billion. Other receivables, primarily related to taxes and social contributions, are gradually gaining in their share of the assets. At the beginning of the 1990s, the total value of financial assets exceeded the value of liabilities, but presently, the amount of receivables is only a fraction of liabilities (see Charts 2-9 and 2-12).

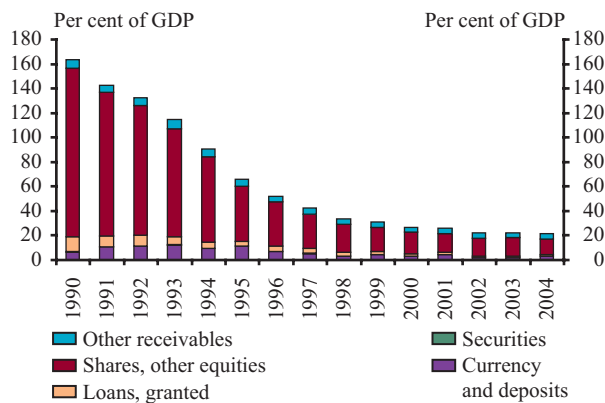
Up to 1995, the value of financial assets was generally increased with the net investments of the government sector. From 1996, however, the receivables of general government decreased as a result of transactions (see Table 2-1). The specific instruments, composing financial assets, contributed to the change in the volume of total receivables at different rates. Loans comprise the sole instrument which, with the exception of a few years, have produced regular net repayment transactions; these were provided in the past by the government to other states and resident corporations in various periods of consolidation.

In the analyzed period, the change in the bank deposits of general government reflects two effects. Firstly, an investment period – also featuring the whole of shares and financial assets – may

be observed in the first half of the 1990s which was substituted with the withdrawal of deposits from 1996. Secondly, short term fluctuations (increase-decrease) – primarily related to instruments composed of transferable deposits – are identified which are followed by the periodical shift in the net borrowing requirement.

**Chart 2-9**

**Consolidated financial assets of general government (year-end stocks)**

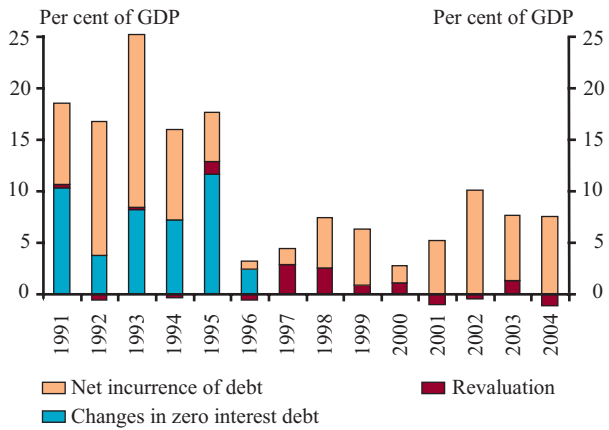


### On debts

We may follow trends in the nominal value of gross consolidated debt of general government (government sector) in financial accounts from the end of 1989. At the end of 1989, total debt amounted to HUF 1,264 billion, corresponding to 73% of the GDP. At the turn of 1993-1994, this rate rose above 90%, and gradually fell to 53.5% by 2001. The faster decrease of the debt rate in 1996 and 2000 is related to the favorable deficit indicator (i.e. the low net borrowing requirement); in the interim years, the trend was supported with financing (privatization) on the assets side. From 2002, the high government deficit reversed the positive trend in the falling rate of debt (see Chart 2-12). The changes in the rate of debt are not only related to net borrowing (transaction) linked to the financing requirement, but also to revaluation due to changes in the foreign exchange rates. Up to

**Chart 2-10**

**Components of annual changes in debt**

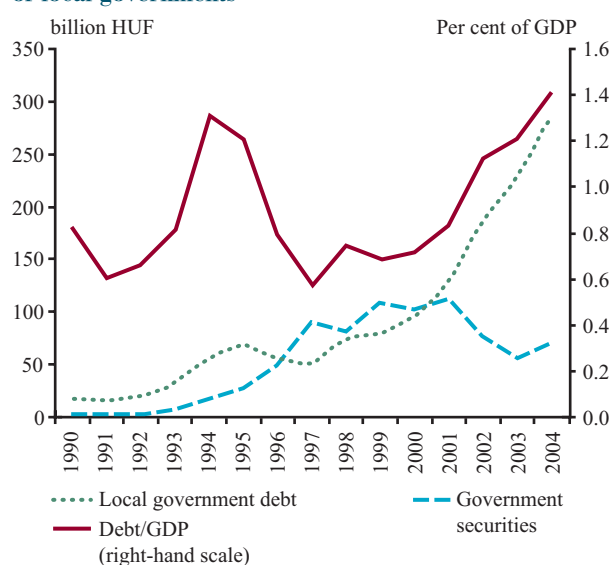


1996, the change in the volume of debt approximated the level of transactions, for basically no revaluation was involved (see Chart 2-10). Within the volume of debt, the rate of foreign exchange loans fluctuated between 3-5%. The volume enhancing effect of revaluation was counterbalanced by the indebtedness of the state in HUF through the MNB. The revaluation loss was incurred by the central bank, presented in the government debt as the transaction change in zero interest debt. In 1997, the rate of foreign exchange items jumped to 40% through the debt swap between the central bank and the state, thus, thereafter the effect of revaluation in changing the amount of debt assumed a determining role. Between 1997 and 2000, the rate of debt was considerably reduced, while the debt increased at an annual rate of 1-3% of the GDP. The rate of debt was again reduced in 2001 and 2002; the volume grew at slower pace than the rate of net borrowing. In 2003, however, this trend was again reversed; the HUF 1,169 billion in assumed debt contributed to the HUF 1,409 billion rise in the volume. At the end of 2004, the gross consolidated debt of general government roughly reached HUF 12,280 billion, corresponding to 60.4% of the GDP.

The contribution of local governments to the government debt is rising at a steady rate; in 1998, it produced 0.8% of total debt, in 2003 the sector produced 2% of the figure. However, between 1997 and 2001, the investments of local governments in government securities contributed to the reduction of consolidated debt at a rate higher than the above figure. Changes witnessed since 2002 require special attention because the amount of consolidated government securities investments has been halved, while the contribution of the sub-sector to the national debt has nearly doubled (see Chart 2-11).

### Chart 2-11

#### Government securities holdings and consolidated debt of local governments

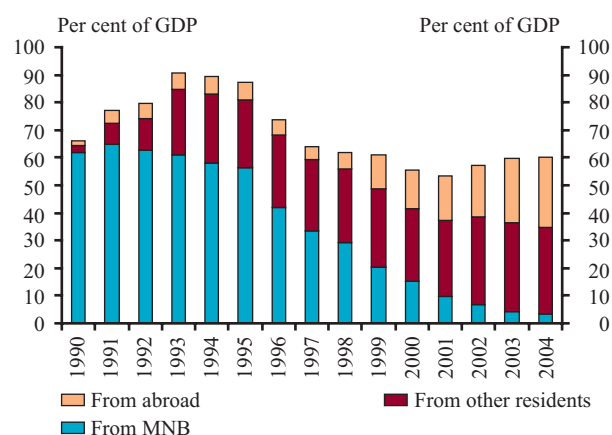


With the exception of the rise in the gross government debt, the distribution of debt according to the type of instruments and creditor has undergone quite favorable trends in the past years. At the end of 1990, government securities – primarily private papers – representing barely 3% of debt (HUF 39 billion) were held by a few banks and the MNB; 96% of loan debt originated from the central bank. At the end of 2003, over 85% of national debt was comprised in securities, while the outstanding amount of loans provided earlier by the

central bank only represented one-third of the gradually falling rate of loan debt. On the whole, at the beginning of the period, the central bank assumed 94% of general government debt; this rate has fallen to the present 5.5%. The GDP-proportional rise in the direct foreign debt of the government sector commenced in 1999, when the state issued foreign exchange bonds abroad for the first time (see Chart 2-12). In the past six years, the rate of debt owed to the rest of the world increased from 10% to 43% of total government debt; three-fourths of the total rise in debt originated from the rest of the world.

### Chart 2-12

#### Gross consolidated government debt by holder sectors



### 2.1.3 Financial links with the rest of the world

Statistics presenting the financial accounts of non-residents comprise the part of financial accounts, in the wider sense, which reveal the financial relationships between foreign (non-resident) and Hungarian (resident) institutional units. These indicate the stocks of financial assets and liabilities of non-resident institutional units and the components of the change in stocks. With respect to content, it basically corresponds to the financial accounts of the balance of payments statistics and the related indication of stocks.

The methodology of the balance of payments is described in the 5th edition of the *Balance of Payments Manual* of the International Monetary Fund, while the methodology of national accounts is based on the 1993 edition of the *System of National Accounts* manual compiled under the supervision of the UN. With the exception of small differences, the rules of accounting set out in the two manuals are basically the same.

The national accounts classify institutional units in the territory of a given country on the basis of their behavior and the role played in the economy. Institutional units operating outside of the territory of a given country and maintaining an economic relationship with residents are commonly classified into a sector defined as the "rest of the world". Similarly to the rest of the world account of national accounts, the balance of payment statistics also present the relationship between residents and non-residents with a formal difference. While national accounts indicate economic relations on

the basis of the rest of the world, the balance of payment statistics approach these from the perspective of residents.

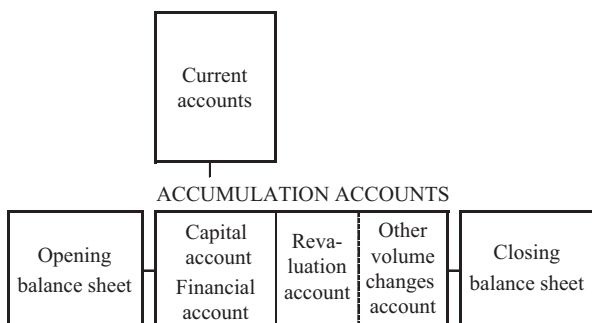
Both national accounts and balance of payments statistics are composed of current and accumulation accounts showing the economic flows, and the balance sheets showing stocks (see Chart 2-13). Notwithstanding the fact that the structure of the balance of payments corresponds to the one of national accounts, its logic varies in a few aspects. The current accounts of national accounts express the production of goods and services, distribution of income and consumption. The capital account represents investments and capital transfers, the financial account indicates the financing processes. The current account of the balance of payments statistics indicates the export and import of goods and services and the income distribution processes. The capital account expresses capital transfers and flow of nonproduced non-financial assets; the financial account defines the financing processes. Similarly to production, imports increase the supply of goods and services, while exports, similarly to consumption and investment, contribute to the use of goods and services. The logic of expressing the income distribution and financing processes is identical in the two statistics.

The substantive correlation between national accounts and the balance of payments statistics is primarily illustrated by the following similarity: in an economy, the difference between savings and investments corresponds to the balance of the current account of balance of payments. This means that if the amount of domestic disposable income varies from domestic use (sum of consumption and investment), this is also indicated in the balance of trade and income distribution conducted with the rest of the world.

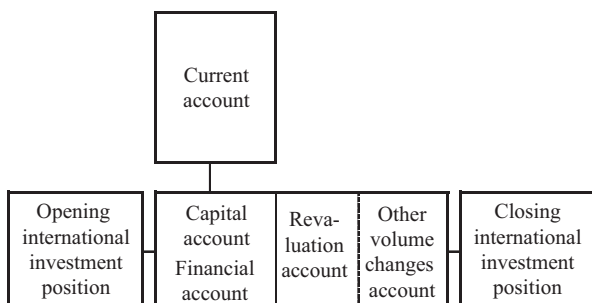
The balance of the current account of balance of payments is not only linked to the balance of savings

**Chart 2-13**

STRUCTURE OF THE NATIONAL ACCOUNTS



STRUCTURE OF THE BALANCE OF PAYMENTS



and investments, but also to changes resulting from transactions in non-resident financial assets and liabilities. The total net borrowing of a country, however, is not only expressed by the balance of the current account of balance of payments, since the balance of the capital account (balance of the flow of capital transfers and nonproduced non-financial instruments) also comprises an item to be financed.

The financial account of the balance of payments, similarly, in a narrower sense, to the financial accounts of the non-resident sector of national accounts, indicates transaction related changes in the financial assets and liabilities. The balance of such changes also corresponds to the net lending/net borrowing of the economy. However, the joint balance of the current and capital accounts and the balance of the financial accounts corresponds only on a theoretical basis; in practice, there are almost always differences arising between the two which results from the errors of statistical measurement. The same correlations apply to the national accounts.

### *Financial accounts and the balance of payments statistics – practical correlations*

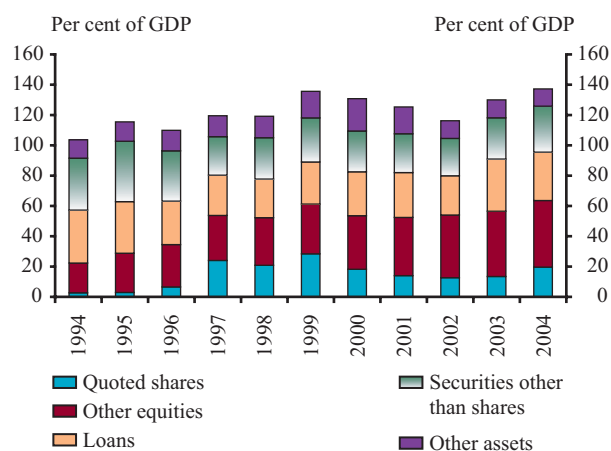
The practice of countries preparing financial accounts varies significantly as to the degree in which it relies on the balance of payments statistics in the process of compiling data on the sector of the rest of the world. In Hungary, the quality and compilation frequency of the balance of payments statistics allows statisticians to rely on it as a fundamental data source for determining non-resident assets and liabilities in the financial accounts. In practice, currently only marginal differences arise between the two areas. The differences are caused by the fact that while the financial accounts statistics had to establish uniform

settlement solutions applied to all sectors, for the purpose of creating internal consistency, the methodological solutions of the balance of payments statistics are not bound in practice to other statistical methods, these must only be in accordance with themselves.

### *Financial accounts of the rest of the world – Hungarian and international data*

When examining the stocks of financial assets of the rest of the world vis-à-vis Hungarian residents in percentage of the GDP (see Chart 2-14), we may observe that since 1994, at the end of each year the stocks exceed the value of the GDP. Of non-resident claims, shares represent one of the highest values; most of these are linked to unquoted equities, the smaller portion is composed of quoted shares. Loans and securities other than shares also play an important role among non-resident receivables. Other claims are composed of bank deposits and other receivables related to accrual accounting (primarily trade credits originating from the trading of goods).

**Chart 2-14** Components of the financial assets of non-residents in Hungary, in percent of GDP, at the end of the years



Source: MNB.

The GDP-proportional rate of non-resident claims vis-à-vis residents reached one of the peak values

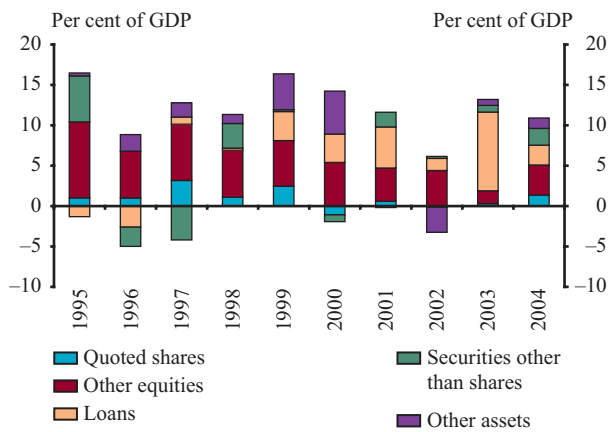
in 1999, approximately 135 percent of the GDP. In the years between 1994 and 1999, the growth was primarily linked to the rise in equities held by non-residents. While in 1994, equity claims reached roughly 20 percent of the GDP, in 1999 the value exceeded 60 percent. Among equities, the rise in the volume of quoted shares was dominant, but the rate of the shares of non-residents held in unlisted companies also grew at a considerable pace. Between 1999 and 2002, the rate of GDP-proportional assets of non-residents decreased which is primarily related to the fall in the stocks of loans and quoted shares. In 2003, the stock of loans and thereby the GDP-proportional total claims of non-residents increased significantly. The growth is generally related to transactions between parent companies and subsidiaries in which the parent company changed its revaluated share claims to loans. In 2004, the GDP-proportional assets of non-residents reached a historical peak – 137 percent of the GDP. The exceptional value is primarily the result of the growth in the price of quoted shares and government securities. These stocks are fundamentally affected by two factors: the balance of the purchase and sale or redemption of instruments (transactions) and the change in the market value of instruments (i.e. revaluation). In addition to the above, flows may also be related to a lesser extent to other changes in volume, reflecting technical and classification changes.

Upon the analysis of transactions published in the financial accounts (see Chart 2-15), we may establish that in each year of the period in question, on the whole, non-residents acquired a high rate of financial instruments issued by residents. Financial assets were sold at significant amount on a few occasions: in 1996-1997, non-residents sold equity securities (primarily government bonds), in 2000 they sold quoted shares. In the

year 2002, primarily the rate of commercial loans slumped in relation to transactions. In respect of loans, the volume of transactions decreased significantly between 1999 and 2002. This trend was generally determined by the falling rate in the net foreign borrowing of resident non-financial corporations. The upward turn in foreign lending in 2003 is primarily linked to loans provided to subsidiaries.

**Chart 2-15**

**Transactions in the financial assets of non-residents in Hungary, in percent of GDP**



Source: MNB.

Revaluations – the financial account statistics have been publishing data on these since July of 2005 – affected specific instruments in various degrees. The price of shares listed at the Budapest Stock Exchange took a steep rise in the second half of the 1990s, and then suffered an enormous plunge in 2000 and 2001. In 2002, the rate of revaluation gains to stocks did not reach the nominal growth rate of the GDP. Thus, in addition to transactions, revaluations also played a major role in increasing and decreasing the GDP-proportional stock of quoted shares held by the rest of the world in the period 2000-2002. In 2004, however, the rise in share prices fundamentally contributed to the rising stock of shares held by non-residents. The rate of instruments denominated in foreign exchange is high in relation to loans and equity securities

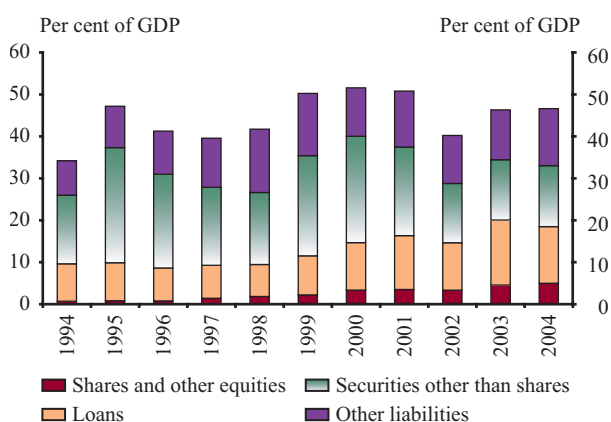


issued by Hungarian residents and owned by non-residents. In these cases, the strengthening of the HUF from 2001 exercised a major impact on the GDP-proportional fall in stocks.

When analyzing the liabilities of the rest of the world vis-à-vis Hungarian residents (see Chart 2-16), we may establish that the stock of these is far lower than the amount of their assets, corresponding to 35-50 percent of the GDP in the examined period. In this instance, shares play a limited, albeit increasing role within total stocks, which are predominantly composed of loans and debt securities. The rate of other liabilities of non-residents is also high, these are mostly composed of trade credits related to the trading of goods.

**Chart 2-16**

**Components of the liabilities of non residents in Hungary, in percent of GDP, at the end of the years**



Source: MNB.

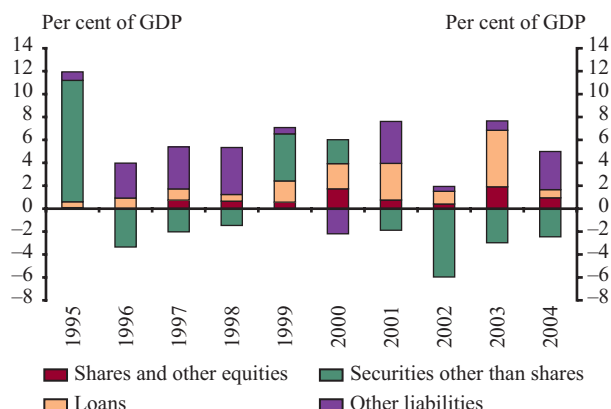
When studying transactions in general (see Chart 2-17), we may observe that with the exception of 2002, the annual amount of purchases exceeded the amount of sales. The amount of the acquisition of foreign issued shares held by residents was relatively high in 2000 and 2003 (roughly 2 percent of the GDP). These transactions generally indicate the foreign acquisitions of large Hungarian corporations (Matáv, Mol, OTP).

Between 1999 and 2002, in addition to the negative net transactions in 2002, the GDP-proportional

fall in the outstanding amounts was greatly contributed to the strengthening of the HUF rate, since debt securities are denominated in foreign exchange.

**Chart 2-17**

**Transactions in the liabilities of non-residents in Hungary, in percent of GDP**

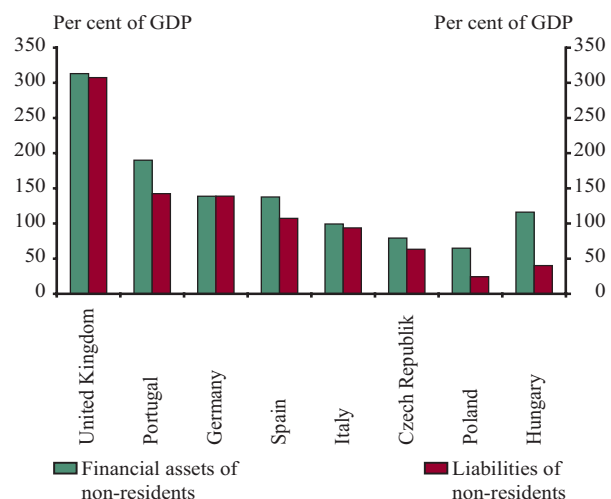


Source: MNB.

When examining the GDP-proportional assets and liabilities of non-residents vis-à-vis residents in international comparison (see Chart 2-18), we may establish that in 2002, such stocks were significantly larger in the countries of the European Union, and the difference between assets (receivables) and liabilities was much smaller than in Hungary. Although

**Chart 2-18**

**Financial assets and liabilities of non-residents in percent of GDP, at the end of 2002**



Source: Eurostat, MNB.

major variations exist in EU countries, as well, in general terms, it is true to say that the old members of the EU indicate greater openness toward non-residents in respect of financial instruments than Hungary. In this respect, Hungary shows greater similarities with the new members of the EU, although among these countries, too, the difference in the stocks of financial assets and liabilities of non-residents is exceptionally high in Hungary.

## 2.1.4. Financial accounts of non-financial corporations

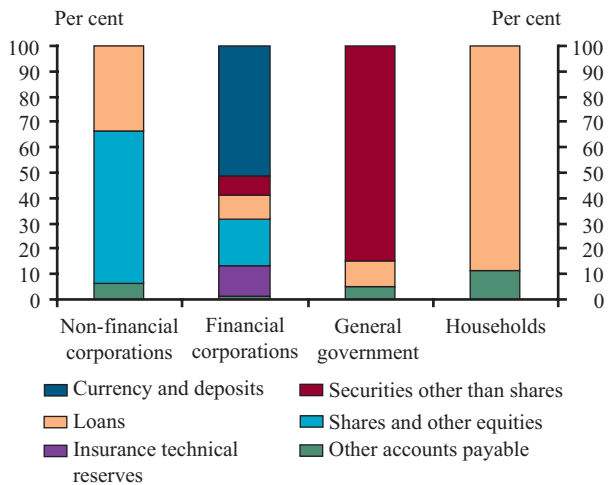
The separation of non-financial corporations from the other sectors is warranted on the basis of their special role in the economy. Yet if their activities vary, their financial solutions and financial position is also likely to differ from other sectors. All of these features may be traced on the basis of the data of financial accounts.

### Structure of liabilities in the economic sectors

Contrary to other sectors, the main liabilities of non-financial corporations are composed of shares and other participations; these comprise 60% of their total liabilities (see Chart 2-19). In addition to the above, loans also play a major role in their financing (one-third of total liabilities). In relation to financial corporations, however, all types of instruments of financial intermediation are present, although the majority of liabilities is composed of deposits. Nevertheless, the role of shares is not insignificant in relation to these, either. The above trend is firstly explained by the fact that the main source of mutual funds (basically their share capital), mutual funds shares, are also linked to such instrument. Secondly, the operation of other financial corporations is conditional on the fulfillment of minimum capital requirements.

**Chart 2-19**

**Composition of resident sectors' liabilities**



Source: MNB.

The difference is all the more apparent if we compare the liabilities structure of other non-corporate sectors with those of non-financial corporations. The assumption of financial liabilities, in respect of general government, is primarily linked to securities (other than shares) and, to a lesser extent, loans, while the same is essentially linked to loans, in relation to households. The above difference again produces the financial reflection of varying economic roles, i.e. in addition to revenues (taxes and contributions, and wages), these sectors receive funds through the drawing of loans and the issue of securities (in relation to the public sector). Beyond the above, theoretically these sectors do not assume any other liabilities (shares, insurance technical reserves and deposits).

Thus, shares and loans represent the typical forms of liabilities assumed by non-financial corporations. In member states of the European Union, the liabilities side of corporations is of a similar structure: on average, the rate of shares reaches 48%, the rate of loans equals 39% (source: Eurostat, end of 2001). The use of such data for the purpose of comparison is possible only to a limited degree, since these are not fully consistent for each country. Among shares, not all countries settled non-share equities, or if

these are settled, they are frequently considered at nominal value. In the United States, the rate of shares reaches 70%, and the rate of loans equals 23% (source: Federal Reserve, end of 2002). The above high rate of shares is related to the exceptionally high development level of capital markets (this rate equaled 75% in 1999).

### Structure of financial assets in specific sectors

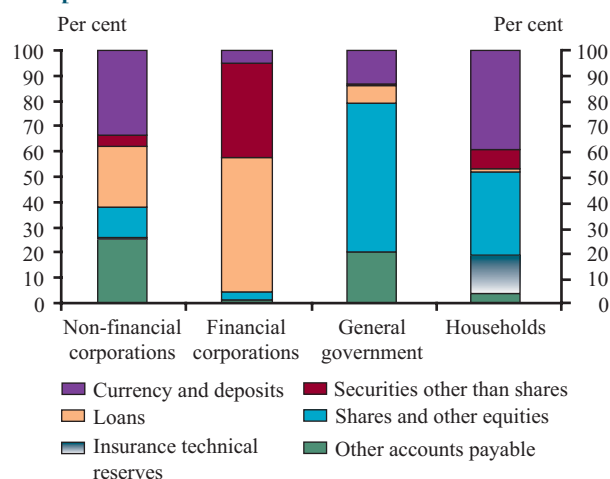
In addition to the financing of operational expenditures, non-financial corporations also finance (non-financial) assets with liabilities. In an extreme case, it is possible that a corporation invests all of its liabilities in the real assets and stocks required for production, and it holds no financial instruments. In any case, it is common in this sector that the rate of liabilities considerably exceeds the amount of financial assets, even if the latter represents a significant value. A non-financial corporation may hold financial assets for several reasons. It is possible that a part of its liabilities is temporarily not tied-up in non-financial instruments required for production. It may thus finance other sectors through financial intermediaries, in the form of deposits, or loans, in relation to corporations in a direct relationship. It is also a reasonable decision if a corporation outsources some of its activity to another company it owns, thereby it holds shares in place of certain tangible assets. (The latter two items may also be booked among consolidated data due to foreign financial relations.) Finally, some of the assets (similarly to liabilities) are recorded as receivables due to outstanding revenue.

Other sectors hold financial assets for other reasons, and consequently, in another structure. Therefore, differences between the sectors may be revealed through their respective composition. These differences may also be traced in the financial accounts (see Chart 2-20). Although the composition of the

assets of non-financial corporations is predominantly uniform, we may establish that cash, deposits and loans dominate the sector. Deposits are represented in the portfolio of households at a similarly high rate, but loans in relation to the latter are not noteworthy. Among the sectors, however, the largest creditors are financial corporations, and in accordance with their activity, beyond the above, only their securities investments are of a significant value. Thus, the greater role of the combination of deposits and loans represents the special aspect of the assets structure of non-financial corporations.

**Chart 2-20**

**Composition of the resident sectors' assets**



Source: MNB.

The third important instrument among the assets of non-financial corporations is the stock of other receivables. This instrument represents the stock of receivables related to outstanding amounts (financially not settled) arising from the ordinary course of business. This type of receivable also plays an important role among the financial assets of general government, generally representing a stock of receivables related to taxes and social security contributions. But this instrument does not represent the highest stock among government instruments; shares continue to comprise over half of general government assets.

## Magyar Nemzeti Bank

In more developed countries, the asset structure of non-financial corporations differs from the Hungarian one. In the EU, shares represent the highest rate of instruments (43%), followed by cash and deposits (18%) and loans (12%). The rate of securities (8%) is also low in these countries. (Of course, the inconsistencies in data for the countries also holds true in relation to the assets side.)

### *Net financial worth*

It is useful to briefly discuss this special item – net financial worth – listed on the liabilities side of the balance sheet in the financial accounts. This figure basically indicates the difference between the total financial assets and liabilities of the given sector. In respect of non-financial corporations, this financial instrument is typically a negative figure, for they invest most of liabilities into tangible assets and intangible assets. In relation to the financial corporate sector, this indicator approximates zero; only a small portion of liabilities are invested in non-financial instruments, these amounts are predominantly relent. Households, however, hold few liabilities and a higher rate of financial assets, therefore their net financial worth is typically a positive figure.

### **2.1.5. Hungarian and international financing patterns**

The study of the financial accounts offers a picture of the net lending/net borrowing processes of an economy and the operation of the financial markets. The unique net lending/net borrowing patterns established in Hungary, linked to the special position of the economy, vary in numerous forms from those applied in developed market economies. The analysis below discusses these differences through the use of data drawn from

Hungarian and international financial accounts (flow of funds) statistics.

The financial account statistics present the stocks of financial assets and liabilities of economic sectors and the changes therein. For the purpose of enabling in-depth analysis, the detail of financial assets and economic sectors is high in the statistics. In the statistics of the Magyar Nemzeti Bank prepared on financial accounts, published on the home page of the bank, the institutional units (sectors) are divided into 12 groups and financial assets (instruments) into 18 types. In tables indicating data in greater detail, the instruments are further divided according to denomination (HUF or foreign exchange) and partner sector. The presentation of such detail has the disadvantage that the user of the statistics has a more difficult time in reviewing the main features of the economic trends and conditions described by the financial accounts. Thus, if we wish to examine the net lending/net borrowing processes of the economy as a whole, for the purpose of an easier overview, it is useful to significantly reduce the number of sectors and financial instruments and combine assets and liabilities.

### *Sector financing in Hungary and the European Union*

Table 2-2 indicates an abbreviated financial account, containing only main financial instruments and sectors, in relation to the net lending/net borrowing processes of Hungary between 1995 and 2004. The period of the examined nine years is sufficient to effectively reveal basic economic behavior featuring the individual sectors. Furthermore, since Hungarian data will be compared with EU data, the data on the European Union is accessible for this period from the Eurostat database.

**Table 2-2**

**Net transactions of the institutional sectors by financial instruments in Hungary, between 1995 and 2003**  
(transactions in percent of GDP)

	Non-financial corporations	Financial corporations	General government	Households	Rest of the world
Monetary gold and SDRs	0,0	0,1	0,0	0,0	0,0
Currency and deposits	1,9	-5,6	-0,1	4,0	-0,2
Securities other than shares	0,3	4,8	-7,5	0,9	1,4
Loans	-4,6	4,4	1,5	-2,5	1,2
Shares and other equity	-3,7	-1,9	-0,4	1,3	4,6
Insurance technical reserves	0,1	-1,8	0,0	1,8	0,0
Other financial assets	0,0	0,0	0,0	0,1	-0,1
<b>Net lending (+) / Net borrowing (-)</b>	<b>-5,9</b>	<b>0,1</b>	<b>-6,5</b>	<b>5,5</b>	<b>7,0</b>

Source: MNB.

In the table, transactions (i.e. changes in volume excluding revaluations and technical modifications) are expressed in the percentage rate of the GDP, with a view to enabling international comparison. The signs mean the following in relation to the different instruments: the positive sign indicates the acquisition of the given financial asset or the decrease of the given liability, the negative sign indicates the decrease of the given financial asset or the increase of the given liability. In the line indicating the balance, the positive sign indicates the net lending of the given sector, the negative sign specifies the net borrowing. The "rest of the world" column (opposite the balance of payments statistics) presents figures from the point of view of non-resident institutional units; thus, the positive sign of the balance indicates the net lending of the rest of the world – the aggregated net borrowing of resident sectors. In relation to some instruments, the sum of changes (horizontally) produces zero. This is related to the fact that the financial assets of an institutional unit comprise the liabilities of another institutional unit, thus the change in assets and liabilities is a corresponding figure, equaling zero when netted. Monetary gold and SDR constitutes an exception to the above rule, since these instruments, deemed to be traditional financial assets,

do not represent the liability of anyone, and are similar to real assets from an economic point of view. Of course, the aggregated balances also amount to zero, with the exception of the difference caused by monetary gold and SDR.

The net lending of a resident sector indicates whether, in a given period, its revenues are in excess of expenditures; whether disposable income and received capital transfers combined are greater than its consumption, investment and provided capital transfers. The net borrowing requirement means that the expenditures of the sector exceed the amount of revenue. Financial accounts indicate that if a sector has a net lending position, it generally acquires financial assets, or reduces its debts. The net borrowing figure involves the increase of liabilities or the reduction of financial assets.

Major differences arise when the typical net lending/net borrowing patterns in the European Union (see Table 2-3) are compared to the Hungarian ones. With respect to the balances, in the examined period, the most important difference is that the net lending of households in the European Union covers the net borrowing requirement of corporations and general government. In Hungary, however, the financial investments of households are much lower than the combined net borrowing of general government and

**Table 2-3**

**Net transactions of the institutional sectors by financial instruments in the European Union, between 1995 and 2003 (transactions in percent of GDP)**

	Non-financial corporations	Financial corporations	General government	Households	Rest of the world
Monetary gold and SDRs	0,0	0,0	0,0	0,0	0,0
Currency and deposits	1,3	-4,9	0,0	2,6	1,0
Securities other than shares	-0,5	1,9	-2,3	0,2	0,6
Loans	-2,9	6,5	0,0	-3,9	0,2
Shares and other equity	0,6	0,6	-0,1	1,4	-2,4
Insurance technical reserves	-0,1	-3,5	0,0	3,6	0,1
Other financial assets	0,4	-0,3	0,2	-0,1	-0,1
<b>Net lending (+) / Net borrowing (-)</b>	<b>-1,2</b>	<b>0,3</b>	<b>-2,2</b>	<b>3,7</b>	<b>-0,6</b>

Source: Eurostat.

corporations. Thus, the European Union effects net financial investments vis-à-vis the rest of the world; i.e. it acquires more foreign financial instruments than the amount of its liabilities rising through transactions vis-à-vis non-EU residents. Hungary, however, raises major foreign funds (its net debt grows) as a result of the combined net borrowing requirement of resident sectors. Since the balances of the transactions of financial accounts are established through real economic processes, trends affecting the balances also indicate that in the European Union, between 1995 and 2003, the consolidated balance of the current and capital accounts of the balance of payments was a positive figure, while the same was a negative figure in Hungary.

The balance of financial corporations approximates zero in the accounts of both economies. This indicates the unique feature of the activity of financial corporations: most of their transactions are linked to financial intermediation, and the balance of their income distribution processes and their investments approximate zero. Transactions implemented in the course of financial intermediation (e.g. reception of deposits, lending) do not modify the net lending of financial institutions because in such cases, the combined amount of their financial assets and liabilities change at an identical rate.

With the exception of the balances of financial corporations, the GDP-proportional rate of the balances reveals a major difference. Several factors contributed to the higher GDP-proportional balances in Hungary. Firstly, the disciplinary strength of the 3 percent limit required in relation to the government deficit is successfully enforced in the EU, but not yet in Hungary. In 1995, the GDP-proportional government deficit reached 7 percent in the European Union; by 1998, the deficit was reduced to less than 2 percent and has not exceeded 3 percent since. Secondly, in the examined nine year period, the economy grew at a significantly faster pace (GDP increased by 36.7%) than in the EU (22% growth). Faster economic growth and a capital deficit required a higher raising of funds in relation to non-financial corporations, in comparison to corporations in the EU. Thirdly, the considerably higher rate of inflation in Hungary “inflated” the balances through the high nominal interest rates on instruments denominated in HUF: the net borrowing requirement grew in relation to debtor sectors paying interest, and the net lending increased in respect of creditor sectors receiving interest.

Through the increase of nominal interest rates, inflation distorts data on income because the amount of nominal interest which provides compensation for

the inflationary depreciation of interest bearing instruments is also presented as income in the statistics. In an economic sense, compensation for inflation incorporated in nominal interest is similar to revaluation, therefore it is expedient to exclude it from changes in volume, similarly to revaluation arising from changes in the foreign exchange rate. In the event of high inflation, this procedure is also recommended by annex B of chapter XIX of the SNA. From July of 2005, the Magyar Nemzeti Bank publishes data on transactions adjusted with compensation for inflation incorporated in interest and net lending, in relation to all sectors. These are so-called operational transactions and balances. If inflation is high and fluctuating in a given country, the operational indicators are more appropriate for a comparison in time and space (with countries with low inflation) because these indicators do not contain the distorting effect of inflation on interest.

In Hungary, operational net lending varied significantly from unadjusted indicators (see Table 2-4). The difference between the two types of balances is particularly large in relation to general government and households, for these two sectors paid and received the largest amount of interest (calculated at a net rate). The operational balances of general government and households indicate minor differences in the average of the period 1995-2003, in comparison to the unadjusted GDP-proportional indicators of the EU. We should

note that in relation to some sectors, the inflationary compensation effect in interest may be significant in EU data because the GDP-proportional amount of interest bearing instruments (with the exception of general government) is greater than in Hungary.

### *Financial assets in Hungary and the European Union*

Upon comparing data relating to specific financial instruments, the largest difference is determined in respect of shares. While major funds are raised from primarily non-residents, and to a lesser extent households, by financial and non-financial corporations through shares and other participations, in the European Union, corporations are providers of net funds to non-residents in relation to such instruments. Changes in the volume of shares held by general government indicate the process of privatization. In Hungary, general government sold more shares in the given period than the amount it purchased. Privatization reduced the rate of shares held by the state, but the recapitalization of the central bank increased the figure. In the European Union, the share sales of the state reached a slight majority, but the total value of privatization was not considerable.

In the European Union, on the market of insurance technical reserves (which includes the liabilities of

### Table 2-4

**Net lending of the institutional sectors Hungary, between 1995 and 2003**  
(transactions in percent of GDP)

	Non-financial corporations	Financial corporations	General government	Households	Rest of the world
Net lending	-5,9	0,1	-6,5	5,5	7,0
Operational net lending*	-4,8	-1,3	-2,8	3,0	6,1

\*Transactions do not contain the compensation for inflation included in nominal interest  
Source: MNB.

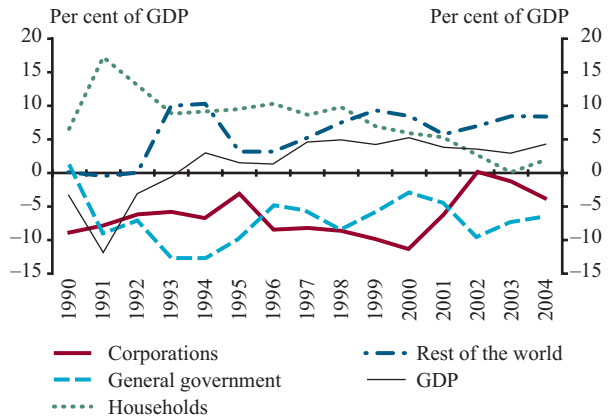
pension funds), the issue of liabilities is of a much higher GDP-proportional rate, as a result of the developed system of insurance and pension fund institutions. The weight of insurance premium reserves is also much greater in the financial investments of households than in Hungary. In respect of securities other than shares, in Hungary government securities dominate the market because general government is the only sector which issues more securities than the amount it purchases. In the European Union, in addition to general government, non-financial corporations are also net issuers. On the whole, securities other than shares play a much smaller role on the market of financial instruments in the EU than in Hungary which is primarily related to the different net borrowing requirements of the government. Naturally, in both economies, financial corporations play a leading role in lending and the reception of deposits, although the GDP-proportional lending rate of the financial sector is much higher in the EU than in Hungary. In Hungary, financial corporations prefer securities investments before lending.

### Changes in the balance of sectors in Hungary and the European Union

When examining the net lending/net borrowing of different sectors, the changes in these comprise an important aspect. The economic cycle and government decisions bear a major impact on trends affecting the balances of sectors. For simplification purposes, the charts below, showing the changes in balances in time, indicate the balance of the net lending/net borrowing of financial and non-financial corporations as combined.

In Hungary, the net lending of households (see Chart 2-21) between 1993 and 1998 reached a relatively high level, roughly 8-10 percent of the

**Chart 2-21**  
**Net lending of institutional sectors in Hungary, in percent of GDP and the volume changes of GDP in percent**



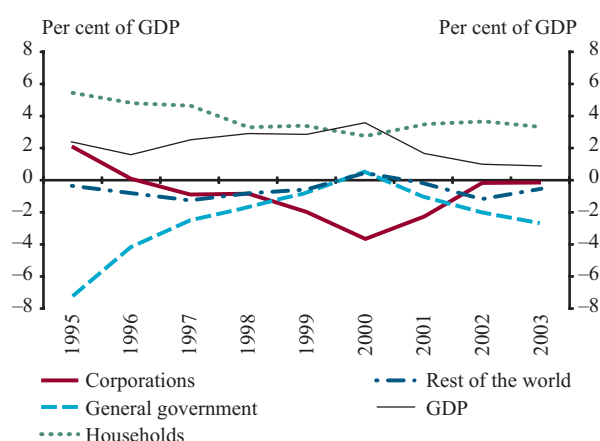
Source: MNB.

GDP; from 1998, the rate fell at a steady pace, and in 2003 it did not even reach half percent of the GDP. At the beginning of the nineties, the net lending of households reached an exceptional value as a result of the remission of home loans. In the examined period (with the exception of 1990), general government regularly spent more than it earned in revenue, therefore a net borrowing requirement arose. The net borrowing position of general government reveals a close tie to the election terms: in the year of elections (1994, 1998, 2002), the rate was high; at the term's halfway point (1996, 2000) it was lower. The net borrowing position of the corporate sector was high in the early nineties, due to corporate losses, and in the second half of the decade, as a result of substantial economic growth and investments. Due to slumping investment in 1995 and 2000, the net borrowing requirement of companies fell considerably. Moreover, as a result of transfers received from the state in 2002, companies effected financial savings. The net borrowing requirement of general government and companies moved in a contrary direction in most of the period. This is explained by the fact that the



acceleration of economic growth reduces the government deficit through increasing tax revenues, raising the net borrowing requirement of companies through the growing rate of investments. The net lending of the rest of the world, i.e. the net borrowing of the country, took a sharp rise in 1993-1994 due to the slumping trend in exports. The balance improving measures of 1995 significantly reduced the net borrowing requirement of the economy vis-à-vis the rest of the world, but this falling trend proved to be only of a temporary nature.

**Chart 2-22**  
**Net lending of institutional sectors in the European Union, in percent of GDP and the volume changes of GDP in percent**



Source: Eurostat.

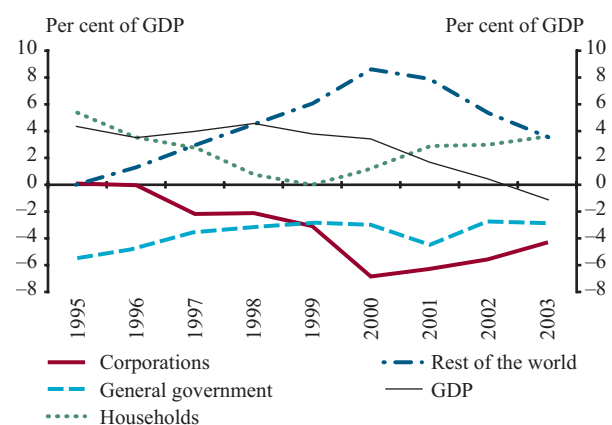
In terms of their direction, changes in the borrowing requirement of both general government and the corporate sector in Hungary between 1998 and 2002 were similar to those in the EU (see Chart 2-22). The EU, too, saw opposite changes in the balances of the two sectors, with year 2000 as a turning point. The business cycle reached its peak in both Hungary and the EU in 2000, which positively affected the balance of general government. It was also at that time that the corporate sector borrowing requirement was the strongest. After 2000, declining growth, in addition to other factors, led to a reduction in firms' borrowing

requirement and an increase in the general government deficit. However, the aggregate net borrowing of general government and the corporate sector is far lower in the EU than in Hungary. Contrary to the prevailing situation in Hungary, household net financial investments in the EU did not shrink rapidly. Except for year 2000, the sector was able to meet the combined borrowing requirement of general government and firms. As a result, the EU is, on the whole, an investor vis-à-vis the rest of the world, i.e. it acquires more financial assets than it incurs liabilities.

The differences between the financing patterns in the EU and Hungary arise from the differing degree of advancedness of the two economies. The financial balances of a less developed economy, e.g. those of Portugal (see Chart 2-23), point to the existence of more similarities with economic processes in Hungary.

Household savings had been shrinking rapidly, and hence unable to meet the borrowing requirement of the other sectors in Portugal prior to 1999. As a result, although its average growth rate was higher than the EU's, the Portuguese economy raised increasingly substantial funds

**Chart 2-23**  
**Net lending of institutional sectors in Portugal, in percent of GDP and the volume changes of GDP in percent**



Source: Eurostat.

abroad. The adoption of the common currency resulted in tight fiscal policy, which, indeed, will also be the inevitable case in Hungary prior to the introduction of the euro. Prior to Portugal's adoption of the euro, the general government borrowing requirement gradually approximated 3% of GDP. Due to declining economic growth, it was hard for Portugal not to exceed the upper limit to general government deficit, which is perhaps why the corporate sector borrowing requirement fell somewhat in 2001-2003. The downward trend of household savings reversed in 1999, which allowed for a reduction in foreign borrowing.

### Financial patterns outside of Europe

The USA has the longest standing tradition of preparing financial accounts. The Federal Reserve has been preparing the flow-of-funds matrix for the US economy, also labeled by the business community as 'flow-of-funds' statistics, since the 1940s. When analyzing US data, it is important to remember that the sum of financial balances of the sectors are not zero generally, as contradictions in the sources of data are also reflected in publica-

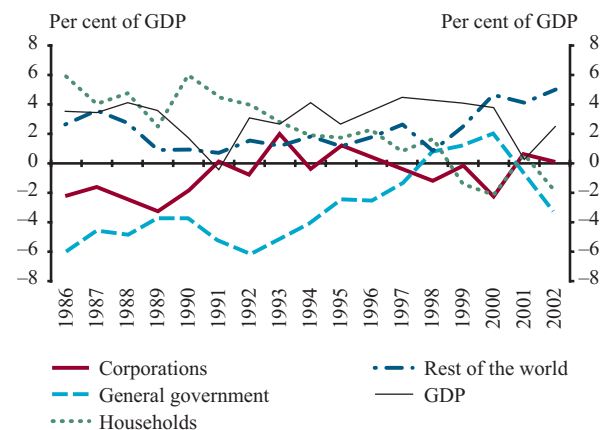
tions. Information from various sources of data reveals that changes in the individual financial assets do not correspond with those in liabilities related to the same instruments. (The reason for this, however, is neither monetary gold nor SDR mentioned earlier in connection with Hungarian data, but statistical errors.) In general, European statistics do not show such differences. Rather, they rely on the sources of data that are thought more reliable. The number of assets-related statistical errors is relatively high in US data, amounting to 1.5% of GDP on average. But in some years it amounted to as high as 4.8% of GDP. Differences of such proportions introduce serious uncertainty into analyses.

A look at net lending/net borrowing of the individual sectors (see Chart 2-24) reveals that there is a substantial difference between European and US economic processes. Unlike its European counterpart, the US economy raises funds abroad, i.e. the net lending of the rest of the world is permanently positive. Foreign financing amounted to 1%–2% of GDP in the 1990s, only to exceed 4% in the period after 2000. The 1990s also saw an unmistakably declining trend in household sector financial investments. Since 1999, money markets have experienced borrowing demand from households on a number of occasions, i.e. households' spending on consumption and investment exceeded their income. As the economy picked up, so the general government deficit gradually shrank in the 1990s. Between 1998 and 2000, the US government was already a financial investor. In 2000, deficit started to grow rapidly, which led to heavy borrowing from abroad.

In Japan (see Chart 2-25), owing to lacklustre economic growth, the general government borrowing requirement increased considerably in the 1990s. The general government deficit soared, while households' financial investments diminished

**Chart 2-24**

**Net lending of institutional sectors in the United States, in percent of GDP and the volume changes of GDP in percent**

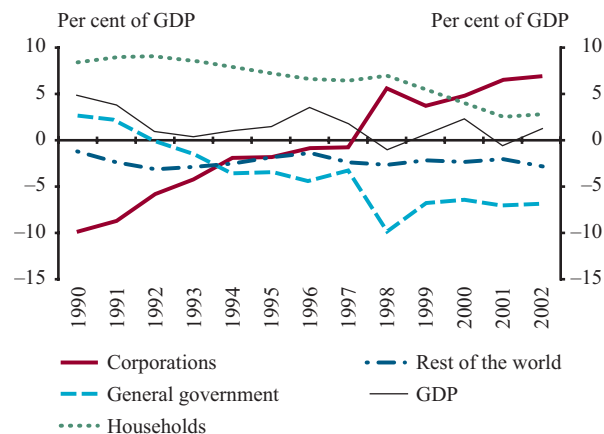


Source: FED, IMF.

significantly. In the early 1990s, the net lending of households amounted to 9% of GDP. Currently, it stands at a mere 2%. At the same time, however, the increase in the aggregate borrowing requirement of the government and households did not lead to any deterioration in either the current account or the capital account of the balance of payments. The reason for this is that stronger corporate lending was able to offset such processes. Due to a sluggish recovery of the domestic economic cycle, companies invested in financial instruments (e.g. government bonds and foreign assets) rather than real assets. Consequently, their net lending grew considerably stronger.

**Chart 2-25**

**Net lending of institutional sectors in Japan, in percent of GDP and the volume changes of GDP in percent**



Source: Bank of Japan, IMF.

## 2.2. Analyses according to instruments

### 2.2.1. Features of securities other than shares

In addition to presenting other financial assets, the financial account statistics offer the most comprehensive picture on the various types of securities incorporating credit relationship, the securities holding and issuing customs of different economic sectors. Accompanied by financial derivatives, these instruments are classified under the umbrella category of securities other than shares, in the breakdown of short term and long term securities, based on the original maturity (upon issue).

With regard to content, the balance of payments statistics cover the same range of securities with the bond (securities with original maturity of over one year) and money market instrument (securities with maturity of maximum one year) categories included among portfolio investments. In place of maturity, the securities statistics, deemed to be the main supplier of financial accounts and also producing independent publications, consider the separate classification of securities according to type (e.g. HUF government bond, treasury bill, resident issued MNB bond, corporate bond) to be of primary relevance. A further common feature of the three statistics is that securities are intended to be indicated at gross market value which means that the stocks also include interest accrued on the securities. (The accrual accounting of interest was implemented in the balance of payments statistics from the Q1 data of 2004.)

The financial account statistics of the central bank considers securities issued in both HUF and foreign exchange, in relation to all issuers. Thus, MNB bonds, for example, define the combined stock of foreign exchange and HUF bonds, and

the government securities also include Hungarian debt outstanding in foreign currency. Mutual funds shares, although assuming a role similar to securities incorporating credit relationship in investments, are classified as shares by both the balance of payments statistics and the financial account statistics. We therefore do not discuss this instrument hereunder.

#### *Securities debtors in Hungary*

In the course of the 1990s, the stock of securities issued by residents was on a steady rise, while the selection of securities types did not change considerably. The role of different economic sectors, however, changed in relation to the issue of securities (see Chart 2-26). Up to 1995, the MNB was the leading securities debtor in Hungary. The sustained leading position was contributed to the fact that in this period, major changes affected the composition of the central bank's liabilities. At the end of 1990, bonds represented only 30 percent of its liabilities vis-à-vis the rest of the world (thus, the larger share was composed of loans), but this ratio was reversed in five years. From 1991, the MNB did not finance general government through lending, therefore the central bank's issue of bonds in the first half of the 1990s served the substitution of earlier loan debts and the increase of foreign exchange reserves. From 1996, the repayment of foreign exchange bonds dominated over new issues, but the volume of stocks did not fall significantly until 2001, as a result of the change in the foreign exchange rate and the issue of domestic HUF bonds commencing at the end of 1997. Central government was the second largest securities debtor in the first half of the 1990s, going head-

to-head with the central bank, to take over the lead from 1996. If we disregard the central bank loans of the government, most of its debt was always represented by securities (government securities).

The behavior of non-financial corporations – ranked third for some time in the area of securities supply – is very interesting. At the beginning of the 1990s, this sector assumed a considerable short term and long term debt (i.e. composed of bills of exchange and bonds) which, disregarding temporary increases in such stocks in the mid-nineties, has basically remained unchanged to this day, amounting to approximately HUF 100 billion. This is possibly explained by the fact that companies primarily raised domestic funds through the issue of securities. Most companies which could presently represent potential securities issuers are in foreign holding, and they are financed through the concentrated funding of the parent company (in avoidance of the costly issue of securities), in the form of shareholder loans. The above trend is well illustrated by the fact that in ten years, the rate of issued securities within the total liabilities of companies fell from one percent to 0.2%. At the beginning of the period, the amount of loans drawn by companies among liabilities equaled thirty times the value of debt securities; presently the figure is 110 times higher.

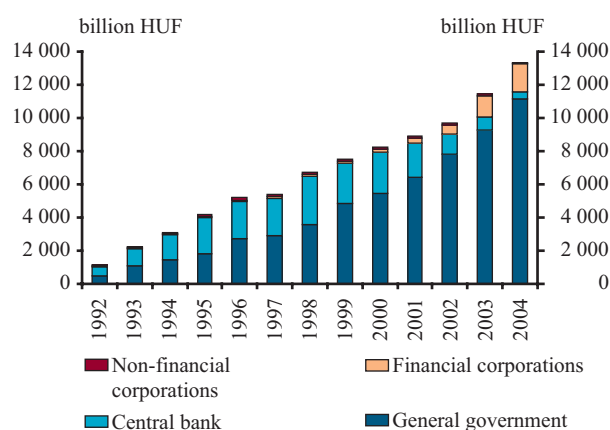
With the exception of the MNB, among financial corporations, the securities debt of credit institutions grew at the highest rate in past years, therefore in 2000, this sector was ranked third in front of non-financial corporations. In 2003, it even changed places with the central bank which reduced its foreign debts at a rapid rate. Thus, after central government, currently the sector is the second largest securities debtor in Hungary. The rising rate in the issue of securities by credit institutions is related to the increased volume of mortgage loans.

The securities debt of all other, yet unspecified economic sectors has only symbolic amount. In 1996,

the central budget assumed social security bonds, issued in 1993 and 1994, in the total value of HUF 16.5 billion. Since then, the social security sub-sector has only loan debt (vis-à-vis the central government). In respect of local governments, roughly 10 city local governments are present on the bond market; their combined supply hardly exceeds HUF 6 billion. The issued amount rose above HUF 20 billion between 1998 and 2002, only as a result of the capital's foreign issue of bonds. Similarly, in 1998 the bond debt of non-monetary financial intermediaries – amounting to HUF 10-20 billion – took a steep rise when Reorg Apport Rt. purchased debt from Postabank through the issue of its own bonds. From the end of 2003, the role of this sector is enhanced on the capital market by way of the securities issue of the Student Loan Center Co.

### Chart 2-26

**Stock of securities issued by resident institutional sectors**



### Holders of domestic securities

Approximately 55-60% of the total value of securities issued by resident institutional units has always been held by residents (see Chart 2-26 and 2-32). In the first half of the 1990s, of the total quantity of outstanding securities, government securities and MNB bonds, each representing roughly half of such quantity, were typically held by residents and

## Magyar Nemzeti Bank

non-residents, respectively. In parallel with the growing proportion of government securities, the increasing acquisition of these securities by non-residents commenced from 1998. Presently, the rate of foreign holding approximates 40 percent in relation to government securities. Financial corporations are considered to be the largest resident holders of government securities; their share of outstanding securities has remained stable in past years, with nearly 50 percent. However, the role of individual sub-sectors in holding securities has changed. With the permanent domination of credit institutions, a considerable quantity of stocks were held by the central bank until 1997. In parallel with the reduction of these quantities, from the end of the 1990s, the investments of insurance companies and pension funds grew at a fast pace. Thus, by now, this sub-sector has basically caught up with credit institutions, considered to be the main investors in this area. The share of the second largest holder sector, households, has gradually fallen from the peak value of 16 percent, measured in 1998, to the present 10 percent.

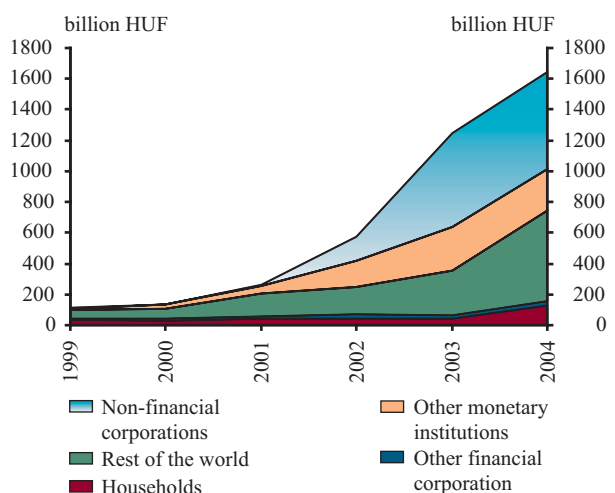
Half of securities issued by non-financial corporations are also held by financial corporations; an additional one-fifth of the papers was acquired by non-residents, and the remaining amount is divided among households and non-financial corporations, whose respective shares vary from time to time. Within the sector of financial corporations, a similar rearrangement affected the holding of corporate securities, but more pronounced as was the case in relation to government securities. Insurance companies, pension funds and other financial intermediaries increased the rate of their investments at a rate which, as soon as 1998, led to the eliminated dominance of credit institutions in the financial corporation sector, with regard to the holding of securities. Presently, insurance companies and pension funds hold

nearly one-third of the securities of resident companies; their share within the sector of financial corporations amounts to 60%.

The securities of financial corporations (primarily credit institutions), other than the central bank, were traditionally held by households and non-residents. As a result of the rise in the rate of home loans and mortgage bonds, from the end of 2000 the range of securities holding sectors was expanded: non-financial corporations and financial corporations, primarily insurance companies and pension funds, assumed a determining role in this area. In 2002, certain credit institutions commenced the financing of the mortgage banks they owned through the purchase of securities which was accompanied by the stalled purchase of securities by companies and households which in turn drew loans. Presently, financial corporations hold 55 percent of securities issued by credit institutions; most of the outstanding amount is held by non-residents (see Chart 2-27).

**Chart 2-27**

### Stock of securities issued by other monetary financial corporation

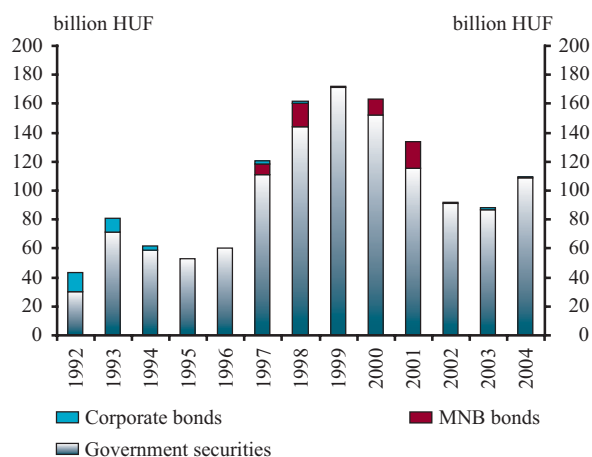


### Portfolio of securities holders

Central government, the leading issuer of securities, holds the fewest securities representing credit

relationship. The government bonds temporarily provided to ÁPV Rt., classified under this sector, and the investment of non-profit institutions, also in this sector, in government securities comprise the noteworthy stocks on the asset side of the sector. Among the receivables of institutions comprising part of central government, in addition to government securities, corporate and credit institution securities are also introduced, albeit in symbolic quantities. Larger amounts of securities are acquired by local governments. On the whole, we may assert that the institutions of general government predominantly hold government securities (government bonds, treasury bills); their balance sheets indicate a higher rate of corporate bonds up to 1994 and MNB bonds between 1997 and 2002 (see Chart 2-28).

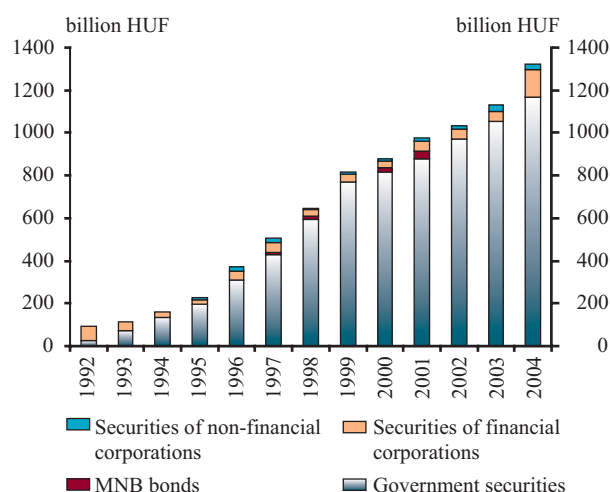
**Chart 2-28**  
Domestic securities investment of general government



The stock of securities of households and non-profit institutions serving households increased at an accelerated rate in the course of the 1990s, but the growth rate slackened and evened out from the end of the decade (see Chart 2-29). The share of government securities dominates among securities, followed by the bonds of financial corporations (credit institutions, other financial intermediaries). Neither corporate, nor central bank papers reserved such a prominent position in the portfolio

of households, as is the case in the general government sector (primarily in relation to local governments).

**Chart 2-29**  
Domestic securities investment of households and non-profit institutions serving households

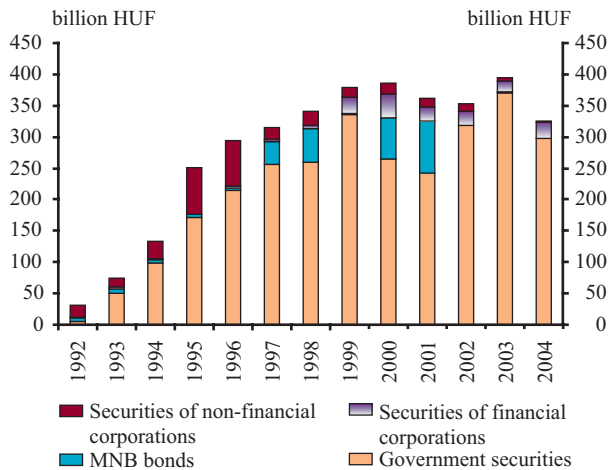


\* Containing the figures of non-profit institutions serving households as well.

The domestic securities investments of non-financial corporations rose at a gradual rate up to 1999, and have basically remained at a constant level (see Chart 2-30). Both the time series of assets and the composition of the securities portfolio mostly resembles the government sector: at the beginning of the period, corporate securities reserve a larger share of stocks, while MNB bonds predominate between 1997 and 2002, in addition to government securities. From 1999, however, the bonds of financial corporations gain in their share of volume. The fall in the rate of intercompany securities is linked to the slumping use of short term commercial securities (bills of exchange) and the gradual decrease in the stock of long term corporate bonds held by non-financial corporations. The stock of domestic securities held by financial corporations (the MNB, credit institutions, insurance companies, pension funds, mutual funds, other financial intermediaries) has indicated a steady rise from year to year (see Chart 2-31). Similar constant growth characterizes the stock of

**Chart 2-30**

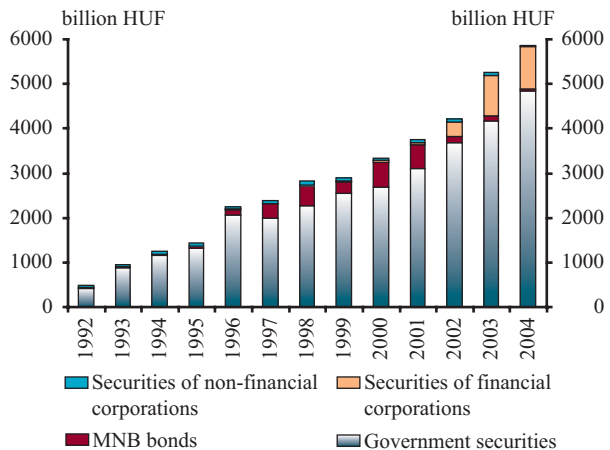
**Domestic securities investment of non-financial corporations**



government securities, dominating the securities portfolios. Between 1997 and 2002, domestic bonds issued by the MNB, from 2002 the securities (mortgage bonds) issued by credit institutions are noteworthy among the assets of the sector.

**Chart 2-31**

**Domestic securities investment of financial corporations**



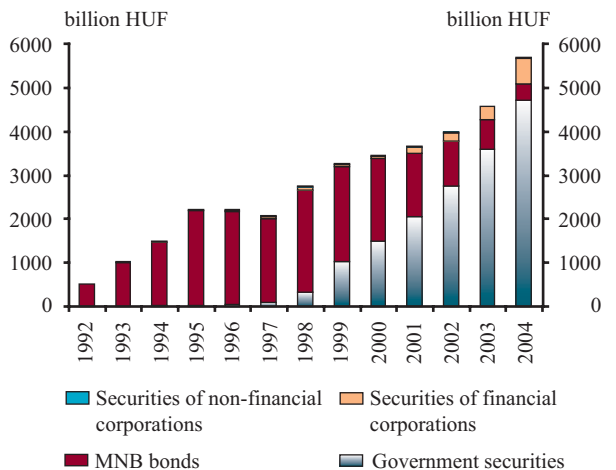
\* MNB, credit institutions, mutual funds, other financial intermediaries, insurance corporations, pension funds.

The most distinctive picture is provided by the composition of securities held by non-residents according to the time series and the type of securities (see Chart 2-32). Prior to 1998, practically only the MNB had a presence on the foreign bond market. From 1995, the central bank terminated the direct net lending to general government. The

above trend is reflected by the fact that the stock of MNB bonds held by non-residents decreased at a moderate rate up to the end of the 1990s, followed by a plunge in stocks. From 1998, the investment of non-residents in securities gained momentum and has remained constant. Thus, by the end of 2001, general government became the largest securities debtor abroad. Beyond the above, we may also observe the enhanced role of the securities of financial corporations (credit institutions) among foreign investments. These securities were always in the majority among the instruments of non-residents over securities issued by non-financial corporations. Of the latter papers, short term commercial papers (bills of exchange) were purchased by the rest of the world; their quantity rose up to the second half of the 1990s, but the rising trend indicates a moderate slowdown.

**Chart 2-32**

**Stock of domestic securities held by the rest of the world**



## 2.2.2. Unquoted shares and other equities

Shares comprise a relatively large proportion of the financial investments of institutional units. However, with the exception of quoted shares, little information is available on such instruments. The financial account statistics of the central bank attempts to



remedy this data deficit which supply data used in the analysis. With the help of tables compiled on the financial accounts of the national economy, we describe below the role of unquoted shares and non-share equities in the financial worth, investments and net lending/borrowing of economic sectors.

### *Do shares really represent financial instruments?*

The assets of a company are provided by the shareholders and creditors; and upon its termination, the assets are distributed among them. In the accounting records, the contribution of shareholders constitutes the own funds of the company, while debts originating from creditors are indicated as outside liabilities. According to the methodology of financial statistics, the purchase of shares or non-share equities is, in the wider sense, an equivalent form of lending (including deposits or the purchase of securities) – i.e. the acquisition of shareholding – in capital investment. Thus, in the statistical sense, the company does not have own funds; a shareholding constitutes a liability vis-à-vis the shareholder (i.e. financial instrument), similarly to the loan owed to the bank, or the unpaid invoice to the supplier. The statistics are based on the analogy, whereby the investor expects property income on its share (in the form of dividend), similarly to the creditor (as interest), and similarly expects to recover the invested amount through the sale of the financial instrument or the liquidation of the company.

According to another – non-statistical – approach, shares do not constitute the receivables or liabilities or anyone, for companies generally do not pay fixed property income on shares and non-share equities. The majority of companies are established indefinitely; in the course of operation, the value of “shareholders’ equity” may change in any direction, the market of shares is quite limited, thus, the recovery of the invested amount may become uncertain. Of course, statisticians must consider these aspects when determining the value of capital investment, and whether it constitutes a financial instrument. If the established institutional unit is expected to produce losses, consume the invested assets, or will otherwise never pay dividend for obvious reasons, or formation and operation clearly does not serve business purposes, the contribution of the founder, shareholder is considered as an unrequited cash supply (transfer), rather than the acquisition of financial asset (share). Non-profit organizations represent an example of the above: the founder is likely to provide its financial contribution without consideration which, in the statistical sense, does not constitute a share-type financial instrument.

### *Forms of shares in financial accounts*

The financial account statistics present shares in the breakdown of types – symmetrically, among both the liabilities of the issuer and the assets of

## Table 2-5

**Data on shares and other equity issued by residents  
(at the end of the year, billion HUF)**

	Quoted shares		Non-quoted shares		Other equity	
	1995	2002	1995	2002	1995	2002
Outstanding amount at the end of the year						
Equity at nominal value	223	593	2,730	3,700	1,655	3,236
Equity at book-value	487	1,746	3,635	6,607	2,020	8,100
Shares at market value	338	2,908	–	–	–	–

Source: MNB.

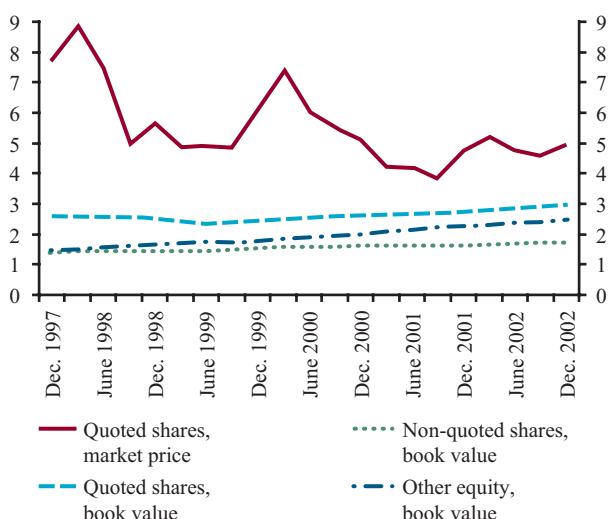
the shareholder sector – which corresponds to a form of liquidity, valuation order. Quoted shares are traded on an organized market; both the price and turnover of these may be reliably measured; the central bank monitors these shares by preparing monthly and quarterly statistics. Unquoted shares also constitute shares outstanding in the legal form of securities. These are issued with the standardized features of securities which support their trading; official records are kept on them which promote the collection of information on the papers, but there is no organized market for them. Finally, the group of other equity represents the third category of shares and equities which indicate financial assets outstanding not in a form of shares. With the exception of data provided by general government and financial intermediaries, information on these instruments is only available from the annual reports, tax returns and incorporation records of issuer companies.

On the basis of the above, the quoted shares of financial and non-financial corporations are listed at observed market value among the liabilities of issuer corporate sectors and the financial assets of holder sectors – any resident sector or the rest of the world. In the absence of an observed market value, unquoted shares and other participations are included in the financial accounts with a figure corresponding to the amount of shareholders' equity contained in the balance sheet of the issuer company. Changes in the shareholders' equity of companies are linked to the past profitability of companies, but in contrast to stock exchange prices, these do not reflect changes in the market environment. The worth of the holders of unquoted shares and non-share equities may also increase in periods in which foreign exchange rates fall; holders book revaluation loss on government securities or quoted shares (see Chart 2-33). In respect of unquoted shares, the

simulation of valuation with market prices with the use of stock exchange data offers an alternative valuation option, as raised by international methodological recommendations. In Hungary, however, the low proportion of listed products to the number of unquoted shares, and the poor representivity of listed corporations (degree in which they represent the full corporate sector) disables the application of stock exchange indicators on a wider plane.

**Chart 2-33**

**Prices of different types of equities**  
(market price, or book value/nominal value)



### *Weight of share-investments in the economy*

Between 1997 and 2003, the recording of quoted shares at market value in the financial accounts increased the value of shares by a total of HUF 1,000-2,000 billion, a rate of 7-23%, and increased total corporate liabilities by 2-10%. (The higher values featured the beginning of the period, the values were lower at the end.). Since varied valuation does not essentially modify the composition of the balance sheet, the financial accounts and the consolidated corporate accounting statements basically offer a similar picture on the changing weight of shares within corporate assets. Different

shares and non-share equities represent a considerable 53-60% of the liabilities of resident non-financial corporations. At the value of shareholders' equity, the figure equals 44-48%; the capital adequacy of organizations operating as shareholding corporations is higher. Naturally, in relation to financial intermediaries, the role of shares on the liabilities side is much smaller. Within the sector, for example, the shareholders' equity of credit institutions represents 8% in the balance sheet.

Within the assets of non-financial corporations, the rate of issued shares has fallen in recent years, despite the value of shares and non-share equities rising at a rate significantly exceeding growth in other instruments. In the examined period, namely, the amount of net capital increases lagged behind the value of borrowing, bond issue and the assumption of other liabilities; i.e. with the exception of the year 2002, companies raised considerable more "external funds" than "own funds" (see Chart 2-34). In the initial period of fund raising, companies drew less loans. However, in the transition period, still underway, borrowing became dominant in the sector, while

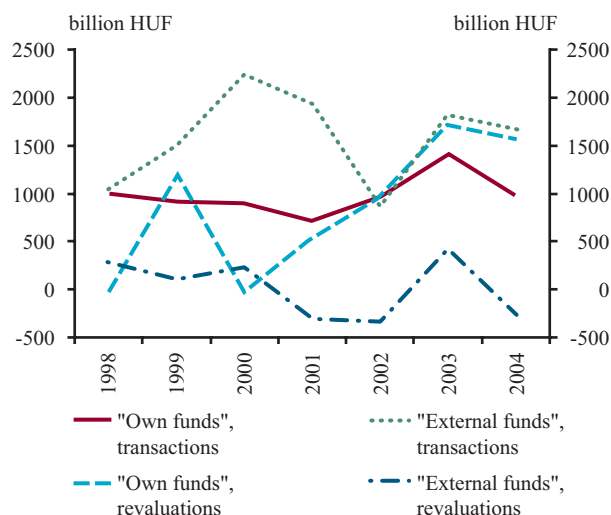
the growth rate temporarily halted in 2002. The trends may be traced in the financial accounts despite the fact that in relation to some of the foreign owned companies (with shares of over 10%), due to the settlement of reinvestment, the realized profit does not increase shareholders' equity as revaluation, but it is indicated as transaction. (The recorded rise in value is smaller and capital investment is greater by such rate.)

### Shareholders

Among issuer sectors, non-financial corporations, too, are considered to be a major shareholder sector in respect of shares and non-share equities (see Chart 2-35). When examining the past six years, intercompany shareholding affects a rising rate of the unquoted shares of non-financial corporations (23-37%) and a falling rate of their non-share equities (23-16%). In relation to financial corporations, playing a less dominant role in the holding of shares, unquoted shares and non-share equities are primarily held by credit institutions, while mutual funds, insurance companies and pension funds almost exclusively hold quoted shares.

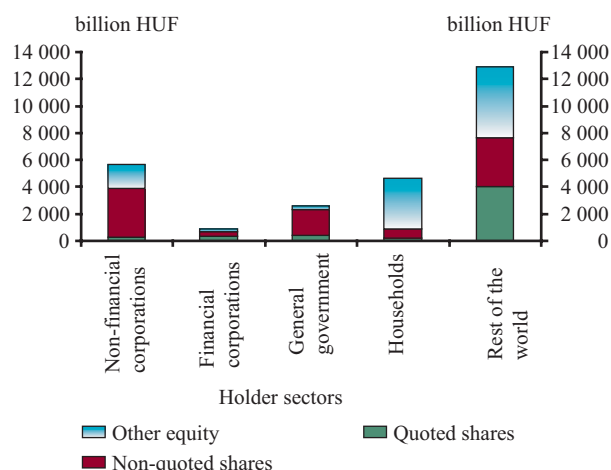
**Chart 2-34**

**Transactions and revaluations of corporate equities ("own funds") and liabilities ("external funds")**



**Chart 2-35**

**Stock of equities held by main sectors at the end of year 2004**



## Table 2-6

**Prices of non-quoted shares and other equities by holder sectors**  
(price calculation: book value/nominal value)

Holder sectors	Non-quoted shares		Other equity	
	1997	2002	1997	2002
Central government	1.4	1.2	0.9	1.3
Local government	1.3	1.4	1.5	1.5
Households	1.5	2.7	2.0	2.9
Rest of the world	1.4	2.2	1.5	2.1

Source: MNB.

In addition to resident non-financial corporations, final shareholder sectors hold a major share, i.e. households and general government, and particularly the rest of the world. Central government, once alone dominating the holding of shares, transformed state-owned companies into shareholding corporations, and sold its corporate assets on a gradual basis. Presently, it owns a narrow range of companies, primarily unlisted corporations. Contrary to plans, the government provided a rather humble package of quoted and unquoted shares to social security funds in the middle of the 1990s which were sold by the funds between 1998 and 2000. Local governments acquired shares and non-share equities from several sources; the rate of their shares stabilized by the end of 1996. The majority of local government shares and non-share equities represent long term investments in public utilities companies. In addition to their membership in co-operatives, from the beginning of the 1990s, households gradually increased their holding of shares and non-share equities, and presently they own the highest rate of non-share equities, jointly with the rest of the world.

The question arises as to what kind of conclusions may be drawn from the composition and changes in the share investments of the different sectors, in relation to the shareholder behavior of the sectors, primarily in connection with the main shareholders

– general government, households and the rest of the world. We may assume that the state will have participations primarily in companies carrying out strategic, public service activities, the operation of which is warranted, irrespective of profitability factors. It is also possible, however, that local governments – by virtue of their relative economic independence – will effect business investments at a rate higher than applicable to central government. The role of business considerations is likely to be even greater in respect of households and particularly foreign investors.

Data in the Hungarian financial accounts are solid in supporting the above assumptions. As financial institutional investors predominantly hold quoted shares, it is useful to examine the rate which quoted shares represent in the shares of other sectors. In relation to non-financial corporations, such rate equaled 5% at the end of 2004, 42% for financial corporations, 15% for general government, 4% for households and 31% for non-resident investors. On the basis of the above, the structure of the shares of households – low rate of quoted shares, high volume of non-share equities – may suggest that the sector holds shares primarily for non-financial investment purposes. We should also consider, however, that non-shareholding companies produce on average two times as much profit, calculated for a unit of capital investment, than shareholding corporations in the examined period.

An additional basis of comparison is offered by the examination of the revaluation of unquoted shares and their "price" in shareholding sectors (see Chart 2-6). In relation to central government, the data excludes shares in the central bank, for the major revaluation of MNB shares due to changes in foreign exchange rates would hamper the comparison of the sectors.

On the price list measured with the corporate shareholders' equity/subscribed capital proportion, unquoted shares with the lowest price are held by the central government; their price fell between 1997 and 2002 as a result of corporate losses. Local governments, generally in a more favorable position in respect of shares, not only stabilized the stock of shares, but the average price of shares also remained constant. Households hold shares and non-share equities with the highest price; the largest rise in prices is indicated in this sector in the past six years.



## 3 Tables







Table 3-1

## Net lending/borrowing of main sectors, billion HUF

(quarterly net lending/borrowing figures calculated from transactions in financial assets and liabilities)

	1990Q1	1990Q2	1990Q3	1990Q4	1991Q1	1991Q2	1991Q3	1991Q4
Total economy (S.1)	-11.5	0.0	6.8	-19.7	15.6	-16.9	8.6	1.4
Non-financial corporations (S.11)	-59.4	-34.0	-39.5	-35.4	-77.2	-55.8	-55.2	-53.3
General government (S.13)	16.9	-14.5	22.1	-0.9	-12.4	-131.1	-18.8	-64.4
Households (S.14)	38.4	34.0	18.2	45.4	74.2	164.9	68.6	121.9
	1992Q1	1992Q2	1992Q3	1992Q4	1993Q1	1993Q2	1993Q3	1993Q4
Total economy (S.1)	27.0	27.1	14.3	-74.4	-59.5	-91.5	-43.5	-153.5
Non-financial corporations (S.11)	9.1	-61.8	-56.0	52.8	-78.7	-66.5	-84.3	-84.6
General government (S.13)	-17.3	-26.5	-29.5	-139.6	-205.0	-100.3	-65.2	-83.5
Households (S.14)	99.1	117.4	94.1	67.6	92.0	97.8	74.9	46.2
	1994Q1	1994Q2	1994Q3	1994Q4	1995Q1	1995Q2	1995Q3	1995Q4
Total economy (S.1)	-87.1	-173.8	-70.8	-118.8	-95.5	-57.7	-25.2	-3.2
Non-financial corporations (S.11)	-64.6	-115.6	-76.3	-43.8	-27.0	-88.3	-52.3	-11.5
General government (S.13)	-146.0	-156.7	-100.0	-153.7	-176.9	-120.2	-91.0	-152.9
Households (S.14)	113.9	98.6	74.4	118.2	70.1	133.1	142.0	182.8
	1996Q1	1996Q2	1996Q3	1996Q4	1997Q1	1997Q2	1997Q3	1997Q4
Total economy (S.1)	-92.1	-37.9	-10.6	-82.8	-163.4	-64.9	-80.1	-137.9
Non-financial corporations (S.11)	-80.8	-104.0	-194.1	-239.0	-241.1	-175.0	-176.3	-152.8
General government (S.13)	-117.0	-71.5	-11.9	-137.0	-88.0	-109.7	-94.1	-198.0
Households (S.14)	135.7	179.8	164.4	200.5	143.8	181.5	187.5	221.9
	1998Q1	1998Q2	1998Q3	1998Q4	1999Q1	1999Q2	1999Q3	1999Q4
Total economy (S.1)	-239.9	-183.8	-117.2	-212.5	-339.6	-325.5	-133.0	-221.6
Non-financial corporations (S.11)	-286.1	-281.6	-212.8	-158.7	-245.0	-271.4	-194.0	-370.2
General government (S.13)	-158.7	-197.4	-139.2	-359.9	-191.5	-170.5	-157.8	-165.6
Households (S.14)	209.4	277.3	214.7	249.1	201.5	173.6	173.6	247.2
	2000Q1	2000Q2	2000Q3	2000Q4	2001Q1	2001Q2	2001Q3	2001Q4
Total economy (S.1)	-299.5	-187.3	-235.3	-380.0	-297.8	-200.1	-84.4	-220.0
Non-financial corporations (S.11)	-315.3	-297.9	-428.3	-485.6	-373.9	-263.6	-279.7	-1.4
General government (S.13)	-97.5	-59.2	-51.4	-178.5	-75.8	-76.2	-17.8	-488.5
Households (S.14)	150.3	180.7	191.4	258.2	79.3	166.5	174.7	376.9
	2002Q1	2002Q2	2002Q3	2002Q4	2003Q1	2003Q2	2003Q3	2003Q4
Total economy (S.1)	-205.9	-246.1	-219.8	-447.9	-407.9	-372.3	-349.2	-430.1
Non-financial corporations (S.11)	-104.4	-21.7	-93.8	212.1	-156.5	36.5	-93.9	-49.2
General government (S.13)	-231.7	-302.9	-216.0	-865.6	-260.8	-331.1	-207.7	-546.2
Households (S.14)	80.6	67.8	26.0	292.9	-43.5	-37.2	-101.5	196.1
	2004Q1	2004Q2	2004Q3	2004Q4				
Total economy (S.1)	-363.7	-521.8	-438.2	-408.6				
Non-financial corporations (S.11)	-116.9	-338.4	-139.6	-211.8				
General government (S.13)	-317.5	-364.8	-259.8	-373.1				
Households (S.14)	20.0	99.5	-5.4	246.1				

## Table 3-2

**Balance sheet of non-financial corporations (S.11), billion HUF**  
(non-consolidated stocks, at the end of the year)

	1989	1995	2000	2001	2002	2003	2004
<b>Financial assets</b>	<b>1,416</b>	<b>4,449</b>	<b>11,060</b>	<b>12,784</b>	<b>14,525</b>	<b>17,743</b>	<b>19,638</b>
Monetary gold and SDRs (AF.1)	–	–	–	–	–	–	–
Currency (AF.21)	29	51	87	89	97	111	106
Deposits (AF.22-29)	258	739	1,632	1,976	2,398	2,621	2,804
Financial corporations (S.12)	258	734	1,622	1,860	2,203	2,438	2,565
Rest of the world (S.2)	0	5	10	116	194	183	239
Securities other than shares, excluding financial derivatives (AF.33)	18	252	458	423	396	440	368
Non-financial corporations (S.11)	14	74	17	13	11	5	2
Financial corporations (S.12)	6	6	105	106	24	18	26
General government (S.13)	0	172	265	243	318	371	297
Rest of the world (S.2)	0	1	71	62	44	45	43
Financial derivatives (AF.34)	..	..	..	..	..	..	..
Loans (AF.4)	178	304	750	1,110	1,268	1,874	2,069
Non-financial corporations (S.11)	..	..	..	..	..	..	..
Financial corporations (S.12)	0	14	33	27	50	43	34
General government (S.13)	0	0	0	0	0	0	0
Households + NPISH (S.14-15)	34	40	46	46	48	48	50
Rest of the world (S.2)	144	250	671	1,037	1,170	1,783	1,985
Shares and other equities (AF.5)	296	1,038	2,822	3,053	3,466	5,195	5,772
Non-financial corporations (S.11)	231	952	2,340	2,486	2,783	4,312	4,755
Financial corporations (S.12)	60	64	148	168	268	270	313
Rest of the world (S.2)	5	22	335	400	416	614	703
Insurance technical reserves (AF.6)	1	21	47	57	66	75	83
Other accounts receivable (AF.7)	636	2,043	5,265	6,077	6,836	7,427	8,435
<b>Liabilities</b>	<b>4,676</b>	<b>9,929</b>	<b>25,635</b>	<b>28,532</b>	<b>31,017</b>	<b>36,302</b>	<b>40,288</b>
Currency (AF.21)	–	–	–	–	–	–	–
Deposits (AF.22-29)	–	–	–	–	–	–	–
Securities other than shares, excluding financial derivatives (AF.33)	45	162	112	112	123	108	74
Non-financial corporations (S.11)	14	74	17	13	11	5	2
Financial corporations (S.12)	21	58	64	62	70	50	25
General government (S.13)	2	0	0	0	0	1	1
Households + NPISH (S.14-15)	9	12	9	15	19	32	24
Rest of the world (S.2)	0	18	22	22	23	21	23
Financial derivatives (AF.34)	..	..	..	..	..	..	..
Loans (AF.4)	716	1,839	6,206	7,055	7,000	8,856	9,676
Non-financial corporations (S.11)	..	..	..	..	..	..	..
Financial corporations (S.12)	465	1,108	3,417	3,711	3,975	4,882	5,613
General government (S.13)	215	105	98	80	74	74	76
Households + NPISH (S.14-15)	0	51	98	101	107	97	100
Rest of the world (S.2)	36	575	2,593	3,163	2,844	3,802	3,887
Shares and other equities (AF.5)	3,181	5,715	13,600	14,838	16,768	19,873	22,430
Non-financial corporations (S.11)	231	952	2,340	2,486	2,783	4,312	4,755
Financial corporations (S.12)	15	145	370	367	386	397	406
General government (S.13)	2,711	2,307	2,052	2,094	2,172	2,306	2,328
Households + NPISH (S.14-15)	185	861	2,717	3,184	3,646	4,055	4,486
Rest of the world (S.2)	39	1,450	6,121	6,708	7,781	8,804	10,455
Insurance technical reserves (AF.6)	0	0	0	0	0	0	0
Other accounts payable (AF.7)	735	2,212	5,716	6,526	7,127	7,465	8,108
<b>Net financial worth</b>	<b>–3,258</b>	<b>–5,480</b>	<b>–14,575</b>	<b>–15,748</b>	<b>–16,492</b>	<b>–18,560</b>	<b>–20,656</b>

Table 3-3

**Balance sheet of financial corporations (S.12), billion HUF**  
(non-consolidated stocks, at the end of the year)

	1989	1995	2000	2001	2002	2003	2004
<b>Financial assets</b>	<b>2,881</b>	<b>9,658</b>	<b>17,608</b>	<b>18,646</b>	<b>19,570</b>	<b>23,261</b>	<b>26,730</b>
Monetary gold and SDRs (AF.1)	29	17	89	130	151	161	118
Currency (AF.21)	37	72	116	147	115	137	127
Deposits (AF.22-29)	356	1,314	2,512	2,536	2,556	2,430	3,290
Financial corporations (S.12)	191	1,101	1,938	1,632	1,826	1,535	2,246
Rest of the world (S.2)	165	213	574	902	729	895	1,044
Securities other than shares, excluding financial derivatives (AF.33)	60	2,994	6,367	6,496	6,341	7,519	8,326
Non-financial corporations (S.11)	21	58	64	62	70	50	25
Financial corporations (S.12)	5	55	595	582	472	1,020	998
General government (S.13)	34	1,341	2,686	3,105	3,688	4,183	4,851
Rest of the world (S.2)	0	1,539	3,022	2,747	2,110	2,265	2,452
Financial derivatives (AF.34)	13	0	312	433	259	417	531
Loans (AF.4)	2,331	4,912	7,382	7,802	9,111	11,403	12,909
Non-financial corporations (S.11)	465	1,108	3,417	3,711	3,975	4,882	5,613
Financial corporations (S.12)	247	443	540	627	1,036	1,515	1,867
General government (S.13)	1,224	2,875	2,014	1,621	1,619	976	770
Households + NPISH (S.14-15)	320	297	703	1,084	1,851	3,032	3,953
Rest of the world (S.2)	75	188	789	759	629	998	786
Shares and other equities (AF.5)	38	224	608	614	710	885	1,057
Non-financial corporations (S.11)	15	145	370	367	386	397	406
Financial corporations (S.12)	17	64	175	177	241	320	413
Rest of the world (S.2)	5	14	64	70	83	169	238
Insurance technical reserves (AF.6)	1	25	26	36	43	43	56
Other accounts receivable (AF.7)	16	102	196	451	285	265	316
<b>Liabilities</b>	<b>2,859</b>	<b>9,613</b>	<b>17,833</b>	<b>18,890</b>	<b>19,860</b>	<b>23,804</b>	<b>27,699</b>
Currency (AF.21)	200	482	974	1,138	1,280	1,467	1,453
Deposits (AF.22-29)	976	4,452	9,099	9,486	9,641	10,447	12,211
Non-financial corporations (S.11)	258	734	1,622	1,860	2,203	2,438	2,565
Financial corporations (S.12)	191	1,101	1,938	1,632	1,826	1,535	2,246
General government (S.13)	64	631	425	661	338	382	591
Households + NPISH (S.14-15)	328	1,518	3,332	3,837	4,147	4,757	5,302
Rest of the world (S.2)	135	469	1,782	1,497	1,127	1,335	1,508
Securities other than shares, excluding financial derivatives (AF.33)	242	2,253	2,700	2,371	1,764	2,054	2,127
Non-financial corporations (S.11)	5	6	105	106	24	18	26
Financial corporations (S.12)	5	55	595	583	472	1,020	998
General government (S.13)	0	0	12	18	1	1	1
Households + NPISH (S.14-15)	17	19	50	82	47	46	130
Rest of the world (S.2)	215	2,174	1,939	1,583	1,221	970	971
Financial derivatives (AF.34)	0	14	315	451	260	462	477
Loans (AF.4)	1,222	1,501	1,416	1,534	2,124	3,541	4,037
Non-financial corporations (S.11)	0	14	33	27	50	43	34
Financial corporations (S.12)	247	443	540	627	1,036	1,515	1,867
General government (S.13)	0	36	40	35	40	40	120
Households + NPISH (S.14-15)	0	0	1	1	2	2	5
Rest of the world (S.2)	974	1,007	802	844	997	1,941	2,011
Shares and other equities (AF.5)	173	565	2,008	2,260	2,814	3,478	4,388
Non-financial corporations (S.11)	60	64	148	168	268	270	313
Financial corporations (S.12)	17	64	175	177	241	320	413
General government (S.13)	82	197	189	189	203	499	266
Households + NPISH (S.14-15)	2	74	561	646	841	787	920
Rest of the world (S.2)	12	166	936	1,080	1,262	1,603	2,475
Insurance technical reserves (AF.6)	33	163	987	1,293	1,658	2,001	2,605
Other accounts payable (AF.7)	14	183	334	357	319	352	403
<b>Net financial worth</b>	<b>23</b>	<b>46</b>	<b>-225</b>	<b>-244</b>	<b>-290</b>	<b>-543</b>	<b>-970</b>

## Table 3-4

**Balance sheet of general government (S.13), billion HUF**  
(non-consolidated stocks, at the end of the year)

	1989	1995	2000	2001	2002	2003	2004
<b>Financial assets</b>	<b>3,252</b>	<b>3,909</b>	<b>4,135</b>	<b>4,443</b>	<b>4,182</b>	<b>4,800</b>	<b>5,132</b>
Monetary gold and SDRs (AF.1)	-						
Currency (AF.21)	2	4	4	5	4	3	3
Deposits (AF.22-29)	64	634	425	661	338	387	596
Financial corporations (S.12)	64	631	425	661	338	382	591
General government (S.13)	0	3	0	0	0	5	6
Securities other than shares, excluding financial derivatives (AF.33)	18	53	164	134	92	89	110
Non-financial corporations (S.11)	2	0	0	0	0	1	1
Financial corporations (S.12)	0	0	12	18	1	1	1
General government (S.13)	16	53	152	116	91	87	109
Rest of the world (S.2)	0	0	0	0	0	0	0
Financial derivatives (AF.34)	0	0	237	316	119	46	37
Loans (AF.4)	255	352	442	372	485	700	827
Non-financial corporations (S.11)	215	105	98	80	74	74	76
Financial corporations (S.12)	0	36	40	35	40	40	120
General government (S.13)	0	130	175	126	247	490	543
Households + NPISH (S.14-15)	0	9	20	24	29	29	33
Rest of the world (S.2)	40	72	109	108	95	67	56
Shares and other equities (AF.5)	2,793	2,513	2,266	2,308	2,399	2,825	2,623
Non-financial corporations (S.11)	2,711	2,307	2,052	2,094	2,172	2,306	2,328
Financial corporations (S.12)	82	197	189	189	203	499	266
Rest of the world (S.2)	0	9	25	26	25	20	29
Insurance technical reserves (AF.6)	0	0	1	1	1	1	2
Other accounts receivable (AF.7)	121	353	598	646	743	749	934
<b>Liabilities</b>	<b>1,345</b>	<b>5,284</b>	<b>8,392</b>	<b>9,276</b>	<b>10,704</b>	<b>12,013</b>	<b>13,860</b>
Currency (AF.21)	-						
Deposits (AF.22-29)	0	3	0	2	2	5	6
Securities other than shares, excluding financial derivatives (AF.33)	52	1,795	5,424	6,406	7,815	9,291	11,137
Non-financial corporations (S.11)	0	171	264	243	318	371	297
Financial corporations (S.12)	34	1,341	2,686	3,105	3,688	4,183	4,851
General government (S.13)	16	53	152	116	91	87	109
Households + NPISH (S.14-15)	2	197	818	879	969	1,053	1,168
Rest of the world (S.2)	0	32	1,504	2,063	2,748	3,596	4,713
Financial derivatives (AF.34)	0	0	67	108	54	83	113
Loans (AF.4)	1,241	3,334	2,601	2,125	2,348	2,053	1,892
Non-financial corporations (S.11)	0	0	0	0	0	0	0
Financial corporations (S.12)	1,224	2,875	2,014	1,621	1,619	976	770
General government (S.13)	0	130	175	126	247	490	543
Households + NPISH (S.14-15)	0	0	0	0	0	0	0
Rest of the world (S.2)	16	328	412	378	481	587	580
Shares and other equities (AF.5)	-						
Insurance technical reserves (AF.6)	-						
Other accounts payable (AF.7)	52	152	300	636	485	582	712
<b>Net financial worth</b>	<b>1,908</b>	<b>-1,375</b>	<b>-4,257</b>	<b>-4,833</b>	<b>-6,523</b>	<b>-7,213</b>	<b>-8,728</b>

**Table 3-5**

**Balance sheet of households (S.14), billion HUF**  
(non-consolidated stocks, at the end of the year)

	1989	1995	2000	2001	2002	2003	2004
<b>Financial assets</b>	<b>826</b>	<b>3,473</b>	<b>9,716</b>	<b>11,314</b>	<b>12,979</b>	<b>14,489</b>	<b>16,448</b>
Monetary gold and SDRs (AF.1)	–	–	–	–	–	–	–
Currency (AF.21)	162	435	872	973	1,139	1,292	1,287
Deposits (AF.22-29)	324	1,471	3,246	3,737	4,040	4,629	5,164
Financial corporations (S.12)	324	1,471	3,246	3,736	4,039	4,628	5,163
Rest of the world (S.2)	0	0	0	1	1	1	1
Securities other than shares, excluding financial derivatives (AF.33)	28	220	839	942	1,006	1,104	1,302
Non-financial corporations (S.11)	9	11	8	15	18	32	24
Financial corporations (S.12)	17	19	47	74	45	45	129
General government (S.13)	2	191	782	851	939	1,023	1,141
Rest of the world (S.2)	0	0	1	2	4	4	8
Financial derivatives (AF.34)	–	–	–	–	–	–	–
Loans (AF.4)	0	51	100	103	111	101	107
Non-financial corporations (S.11)	0	51	98	101	107	97	100
Financial corporations (S.12)	0	0	1	1	1	1	3
Rest of the world (S.2)	0	0	1	1	3	3	4
Shares and other equities (AF.5)	187	934	3,285	3,842	4,506	4,871	5,437
Non-financial corporations (S.11)	185	861	2,713	3,183	3,645	4,054	4,484
Financial corporations (S.12)	2	73	552	634	828	780	912
Rest of the world (S.2)	0	0	20	26	33	37	42
Insurance technical reserves (AF.6)	31	141	939	1,235	1,591	1,924	2,519
Other accounts receivable (AF.7)	95	221	436	481	587	568	631
<b>Liabilities</b>	<b>418</b>	<b>518</b>	<b>1,114</b>	<b>1,538</b>	<b>2,359</b>	<b>3,538</b>	<b>4,533</b>
Currency (AF.21)	–	–	–	–	–	–	–
Deposits (AF.22-29)	–	–	–	–	–	–	–
Securities other than shares, excluding financial derivatives (AF.33)	–	–	–	–	–	–	–
Financial derivatives (AF.34)	–	–	–	–	–	–	–
Loans (AF.4)	354	345	767	1,146	1,923	3,098	4,027
Non-financial corporations (S.11)	34	40	46	46	48	48	50
Financial corporations (S.12)	320	297	695	1,069	1,838	3,011	3,934
General government (S.13)	0	9	20	24	29	29	33
Rest of the world (S.2)	0	0	7	9	8	9	10
Shares and other equities (AF.5)	–	–	–	–	–	–	–
Insurance technical reserves (AF.6)	–	–	–	–	–	–	–
Other accounts payable (AF.7)	64	173	346	392	437	440	506
<b>Net financial worth</b>	<b>409</b>	<b>2955</b>	<b>8,602</b>	<b>9,776</b>	<b>10,620</b>	<b>10,951</b>	<b>11,914</b>

## Table 3-6

Stocks of securities other than shares at the end of the year, billion HUF

Long-term securities issued by central government (S.1311)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	0	65	91	77	63	94	107
Central bank (S.121)	5	453	401	185	178	210	209
Other monetary institutions (S.122)	16	580	987	1,196	1,226	1,473	1,611
Other financial intermediaries (S.123)	0	33	143	173	285	233	257
Financial auxiliaries (S.124)	0	7	40	48	46	57	66
Insurance corporations and pension funds (S.125)	8	55	669	912	1,106	1,373	1,858
Central government (S.1311)	1	9	49	1	13	21	14
Local government (S.1313)	1	15	50	80	47	26	24
State government (S.1312)	13	12	0	0	0	0	0
Households (S.14)	0	74	205	211	211	217	286
Non-profit institutions serving households (S.15)	0	0	10	12	11	12	8
Rest of the world (S.2)	0	14	1,483	1,968	2,643	3,526	4,593
Total	43	1,317	4,129	4,864	5,830	7,241	9,032
Short-term securities issued by central government (S.1311)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	0	106	173	165	253	276	189
Central bank (S.121)	0	6	0	0	0	0	0
Other monetary institutions (S.122)	5	118	179	291	393	400	461
Other financial intermediaries (S.123)	0	22	114	128	203	202	108
Financial auxiliaries (S.124)	0	8	21	27	42	40	32
Insurance corporations and pension funds (S.125)	0	39	129	143	204	193	245
Central government (S.1311)	1	6	2	1	2	11	25
Local government (S.1313)	0	11	51	33	29	28	46
State government (S.1312)	0	0	0	0	0	0	0
Households (S.14)	2	117	577	640	728	806	855
Non-profit institutions serving households (S.15)	0	5	25	16	19	19	18
Rest of the world (S.2)	0	18	0	75	86	70	120
Total	8	457	1,272	1,519	1,960	2,043	2,099
Securities issued by local governments (S.1313)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	0	1	0	1	1	1	1
Central bank (S.121)	0	0	0	0	0	0	0
Other monetary institutions (S.122)	1	1	1	1	2	2	2
Other financial intermediaries (S.123)	0	0	0	0	1	0	0
Financial auxiliaries (S.124)	0	0	0	0	0	0	0
Insurance corporations and pension funds (S.125)	0	3	1	2	2	2	2
Central government (S.1311)	0	0	0	0	0	0	0
Local government (S.1313)	0	0	0	0	0	0	0
State government (S.1312)	0	0	0	0	0	0	0
Households (S.14)	0	0	0	0	0	0	0
Non-profit institutions serving households (S.15)	0	0	0	0	0	0	0
Rest of the world (S.2)	0	0	21	19	18	0	1
Total	1	4	24	23	24	6	6

Table 3-7

## Stocks of securities other than shares at the end of the year, billion HUF

Securities issued by the central bank (S.121)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	0	5	66	82	1	1	1
Central bank (S.121)	0	0	0	0	0	0	0
Other monetary institutions (S.122)	1	50	317	257	149	111	52
Other financial intermediaries (S.123)	0	0	211	226	0	0	0
Financial auxiliaries (S.124)	0	0	6	4	0	0	0
Insurance corporations and pension funds (S.125)	0	0	33	39	0	0	0
Central government (S.1311)	0	0	0	2	0	0	0
Local government (S.1313)	0	0	11	17	0	0	0
State government (S.1312)	0	0	0	0	0	0	0
Households (S.14)	0	0	15	30	0	0	0
Non-profit institutions serving households (S.15)	0	0	3	7	0	0	0
Rest of the world (S.2)	215	2,151	1,874	1,431	1,037	673	367
Total	216	2,207	2,536	2,094	1,186	784	419
Securities issued by other monetary financial institutions (S.122)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	5	0	13	15	23	17	25
Central bank (S.121)	0	0	0	0	0	0	0
Other monetary institutions (S.122)	5	3	2	6	158	609	631
Other financial intermediaries (S.123)	0	0	8	14	61	103	78
Financial auxiliaries (S.124)	0	0	0	0	0	7	7
Insurance corporations and pension funds (S.125)	0	0	17	36	104	170	184
Central government (S.1311)	0	0	0	0	0	0	0
Local government (S.1313)	0	0	1	0	1	1	1
State government (S.1312)	0	0	0	0	0	0	0
Households (S.14)	17	17	32	44	45	45	128
Non-profit institutions serving households (S.15)	0	0	0	0	1	0	1
Rest of the world (S.2)	0	23	61	149	181	292	589
Total	26	43	134	264	574	1,245	1,643
Securities issued by other financial intermediaries (S.123)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	0	0	26	8	0	0	0
Central bank (S.121)	0	0	0	0	0	0	0
Other monetary institutions (S.122)	0	2	0	0	0	14	25
Other financial intermediaries (S.123)	0	0	0	0	0	1	10
Financial auxiliaries (S.124)	0	0	0	0	0	0	0
Insurance corporations and pension funds (S.125)	0	0	0	0	0	5	11
Central government (S.1311)	0	0	0	0	0	0	0
Local government (S.1313)	0	0	0	0	0	0	0
State government (S.1312)	0	0	0	0	0	0	0
Households (S.14)	0	2	1	0	0	0	1
Non-profit institutions serving households (S.15)	0	0	0	0	0	0	0
Rest of the world (S.2)	0	0	4	4	4	5	16
Total	0	4	30	13	4	25	64

## Table 3-8

**Stocks of securities other than shares and mutual fund shares at the end of the year, billion HUF**

Securities issued by non-financial corporations (S.11)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	14	74	17	13	11	5	2
Central bank (S.121)	0	0	0	0	0	0	0
Other monetary institutions (S.122)	21	38	18	15	19	14	8
Other financial intermediaries (S.123)	0	0	26	22	17	7	4
Financial auxiliaries (S.124)	0	0	0	0	0	1	0
Insurance corporations and pension funds (S.125)	0	20	20	25	34	28	13
Central government (S.1311)	1	0	0	0	0	1	1
Local government (S.1313)	1	0	0	0	0	0	0
State government (S.1312)	0	0	0	0	0	0	0
Households (S.14)	9	11	8	15	18	32	24
Non-profit institutions serving households (S.15)	0	1	1	1	1	0	0
Rest of the world (S.2)	0	18	22	22	23	21	22
<b>Total</b>	<b>45</b>	<b>162</b>	<b>112</b>	<b>112</b>	<b>123</b>	<b>108</b>	<b>74</b>
Mutual fund shares issued by other monetary financial institutions (S.122)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	0	1	13	19	37	33	52
Central bank (S.121)	0	0	0	0	0	0	0
Other monetary institutions (S.122)	0	0	1	2	0	2	3
Other financial intermediaries (S.123)	0	0	1	2	3	4	7
Financial auxiliaries (S.124)	0	0	1	1	2	1	1
Insurance corporations and pension funds (S.125)	0	0	1	2	4	3	7
Central government (S.1311)	0	0	0	0	0	0	0
Local government (S.1313)	0	0	1	1	2	1	1
State government (S.1312)	0	0	0	0	0	0	0
Households (S.14)	0	9	63	95	139	125	230
Non-profit institutions serving households (S.15)	0	0	0	1	1	2	4
Rest of the world (S.2)	0	0	0	0	1	1	2
<b>Total</b>	<b>0</b>	<b>10</b>	<b>82</b>	<b>122</b>	<b>190</b>	<b>173</b>	<b>306</b>
Mutual fund shares issued by other financial intermediaries (S.123)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	0	13	18	27	41	34	36
Central bank (S.121)	0	0	0	0	0	0	0
Other monetary institutions (S.122)	0	1	11	12	15	21	17
Other financial intermediaries (S.123)	0	1	5	4	8	17	13
Financial auxiliaries (S.124)	0	0	0	0	0	0	0
Insurance corporations and pension funds (S.125)	0	0	22	25	52	74	116
Central government (S.1311)	0	0	1	1	1	1	1
Local government (S.1313)	0	0	9	15	14	13	15
State government (S.1312)	0	0	0	0	0	0	0
Households (S.14)	0	41	400	478	606	564	548
Non-profit institutions serving households (S.15)	0	1	8	11	12	5	5
Rest of the world (S.2)	0	1	13	15	8	10	7
<b>Total</b>	<b>0</b>	<b>58</b>	<b>486</b>	<b>590</b>	<b>758</b>	<b>737</b>	<b>758</b>



**Table 3-9****Stock of securities other than shares at the end of the year, issued by rest of the world sector, billion HUF**

Long-term securities issued by the rest of the world (S.2)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	0	1	59	50	32	31	30
Central bank (S.121)	0	1,028	2,036	2,302	1,662	1,542	1,731
Other monetary institutions (S.122)	0	0	43	76	65	67	55
Other financial intermediaries (S.123)	0	0	11	4	25	6	2
Financial auxiliaries (S.124)	0	0	0	0	0	0	0
Insurance corporations and pension funds (S.125)	0	1	2	7	8	2	2
Central government (S.1311)	0	0	0	0	0	0	0
Local government (S.1313)	0	0	0	0	0	0	0
State government (S.1312)	0	0	0	0	0	0	0
Households (S.14)	0	0	1	2	4	4	8
Non-profit institutions serving households (S.15)	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>1,030</b>	<b>2,153</b>	<b>2,441</b>	<b>1,796</b>	<b>1,652</b>	<b>1,827</b>
Short-term securities issued by the rest of the world (S.2)							
	1989	1995	2000	2001	2002	2003	2004
<b>Non-financial corporations (S.11)</b>	0	0	13	11	11	14	13
Central bank (S.121)	0	510	926	356	340	641	652
Other monetary institutions (S.122)	0	0	2	1	1	0	0
Other financial intermediaries (S.123)	0	0	1	1	9	3	3
Financial auxiliaries (S.124)	0	0	0	0	0	0	0
Insurance corporations and pension funds (S.125)	0	0	0	0	0	4	7
Central government (S.1311)	0	0	0	0	0	0	0
Local government (S.1313)	0	0	0	0	0	0	0
State government (S.1312)	0	0	0	0	0	0	0
Households (S.14)	0	0	0	0	0	0	0
Non-profit institutions serving households (S.15)	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>510</b>	<b>942</b>	<b>369</b>	<b>361</b>	<b>662</b>	<b>676</b>
Shares and other equities issued by the rest of the world (S.2)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	5	22	334	400	416	614	703
Central bank (S.121)	5	13	8	2	2	3	4
Other monetary institutions (S.122)	0	2	12	20	26	107	120
Other financial intermediaries (S.123)	0	0	36	35	48	48	79
Financial auxiliaries (S.124)	0	0	0	1	2	2	2
Insurance corporations and pension funds (S.125)	0	0	8	10	6	10	33
Central government (S.1311)	0	9	25	26	25	20	29
Local government (S.1313)	0	0	0	0	0	0	0
State government (S.1312)	0	0	0	0	0	0	0
Households (S.14)	0	0	20	26	33	37	42
Non-profit institutions serving households (S.15)	0	0	0	0	0	0	0
<b>Total</b>	<b>11</b>	<b>46</b>	<b>443</b>	<b>521</b>	<b>557</b>	<b>840</b>	<b>1,012</b>

## Table 3-10

Stocks of shares and other equities at the end of the years, billion HUF

Quoted shares issued by non-financial corporations (S.11)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	0	17	211	161	203	217	98
Central bank (S.121)	0	0	0	0	0	0	0
Other monetary institutions (S.122)	0	1	27	17	19	26	25
Other financial intermediaries (S.123)	0	3	58	31	33	38	39
Financial auxiliaries (S.124)	0	0	0	1	0	0	0
Insurance corporations and pension funds (S.125)	0	1	70	74	81	96	111
Central government (S.1311)	0	82	254	220	220	290	302
Local government (S.1313)	0	4	24	21	18	22	29
State government (S.1312)	0	5	0	0	0	0	0
Households (S.14)	0	38	209	151	119	115	119
Non-profit institutions serving households (S.15)	0	0	3	0	1	0	1
Rest of the world (S.2)	0	157	2,086	1,703	1,615	1,853	2,655
Total	0	308	2,942	2,379	2,310	2,659	3,380
Non-quoted shares issued by non-financial corporations (S.11)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	18	484	1,083	1,265	1,463	2,508	2,901
Central bank (S.121)	0	6	10	10	10	9	9
Other monetary institutions (S.122)	7	55	57	74	64	50	70
Other financial intermediaries (S.123)	0	13	32	13	14	19	16
Financial auxiliaries (S.124)	0	0	0	0	0	0	0
Insurance corporations and pension funds (S.125)	1	8	2	2	3	6	6
Central government (S.1311)	71	1,523	1,055	1,069	1,128	1,181	1,182
Local government (S.1313)	0	349	539	540	545	535	530
State government (S.1312)	0	3	1	0	0	0	0
Households (S.14)	15	185	425	507	606	622	635
Non-profit institutions serving households (S.15)	0	0	1	1	1	1	1
Rest of the world (S.2)	14	699	1,462	1,666	1,936	2,082	2,500
Total	125	3,325	4,665	5,147	5,770	7,014	7,850
Other equities issued by non-financial corporations (S.11)							
	1989	1995	2000	2001	2002	2003	2004
Non-financial corporations (S.11)	213	451	1,046	1,060	1,117	1,587	1,756
Central bank (S.121)	0	1	1	1	1	1	1
Other monetary institutions (S.122)	7	54	96	121	140	122	101
Other financial intermediaries (S.123)	0	1	1	1	2	3	2
Financial auxiliaries (S.124)	0	0	0	0	0	0	0
Insurance corporations and pension funds (S.125)	0	3	18	22	20	26	26
Central government (S.1311)	2,190	79	80	129	145	162	170
Local government (S.1313)	450	259	99	114	115	115	115
State government (S.1312)	0	3	1	0	0	0	0
Households (S.14)	170	638	2,079	2,525	2,919	3,316	3,730
Non-profit institutions serving households (S.15)	0	0	0	0	0	0	0
Rest of the world (S.2)	25	595	2,573	3,339	4,229	4,869	5,300
Total	3,055	2,083	5,994	7,312	8,687	10,201	11,200

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