

## **Methodological Changes Affecting the Financial Accounts – Changes Implemented and Changes Postponed**

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The comprehensive revision of national accounts and the related financial statistics is due in every 15–25 years, providing an opportunity for the international statistics community to review – in the light of developments in the economic and financial environment and changes in user requirements – the previously defined rules of methodological standards and to modify them as required, including fundamental changes. Of course, the modifications presented in the manuals are the results of serious compromises; indeed, the comparability of data in time and space, the availability of homogenous time series and broad-scale applicability are important requirements to be considered during the preparation or change of international standards.

These review and preparation efforts have led to numerous forward-looking recognitions in the recent revision period regarding the directions and areas of the methodological revision; however, most of them have not or only partially have been implemented. The author presents the main methodological issues that affect the system of national accounts in general, and the financial accounts in particular. Besides presenting the changes reflected in the data, the purpose of this paper is to give an insight into the reasons for the changes.

**KEYWORDS:**

National accounts.  
System of National Accounts.  
Financial statistics.

As a part of the system of national accounts, financial accounts constitute an area of financial statistics that present the financing and financial wealth of economic agents, sectors and the total economy. Accordingly, the compilation and presentation of national accounts are governed by the recommendations and rules of national accounts manuals (SNA<sup>1</sup>, ESA<sup>2</sup>). Based on the division of labour within the official statistical service, in Hungary the compilation and quarterly publication of the financial accounts statistics are the responsibilities of the MNB<sup>3</sup>. Within the system of national accounts, financial accounts are fundamentally affected by the boundary of financial instruments – the types of assets and liabilities – through which the financing and financial wealth of the economy is presented, the valuation of these instruments in the statistics, the borderline between financial and non-financial transactions – ultimately, between financial and non-financial accounts –, and the sectoral breakdown in which stocks and flows are presented in the statistics.

For the most part, the latest international statistical methodology revision provided a more detailed breakdown of existing economic sectors and beyond this, it only introduced minor reclassifications between economic sectors regarding their content, slightly expanded the range of financial instruments (asset coverage) and moderately changed the delineation between financial and non-financial accounts (i.e. balancing items). The recording and valuation principles pertaining to transactions and assets remained essentially unchanged. In short, apart from a few modifications, the current financial accounts statistics present the same financial worth and financing flows as those before the methodological revision.

Regarding Hungarian statistical data, the most profound change involved the substantive expansion of the financial corporations sector to the expense of non-financial corporations, and the different recording of the takeover of private pension fund reserves in the accounts of general government and households. These topics are addressed at length below.

## 1. Expansion of the range of financial instruments

With the methodological revision, a number of new instruments – both financial and non-financial – were included in the system of national accounts as well as the

<sup>1</sup> SNA: System of National Accounts.

<sup>2</sup> ESA: European System of Accounts.

<sup>3</sup> MNB (Magyar Nemzeti Bank): Central Bank of Hungary.

related financial statistics. Regarding non-financial assets, some assets the use of which had been previously recorded as consumption have become capitalised (military assets, research and development). In the case of financial instruments, in turn, the statistical balance sheet was expanded to include certain, previously off-balance sheet contingent assets (standardised guarantees, employee stock options), while the recording of hitherto asymmetrically treated, special financial instruments was brought more in line with that of the rest of the financial instruments. It is another achievement that the implicit pension liability of social security system (pension claims of households) was included, at least as supplementary data, in the minimum required dataset of national accounts.

With respect to financial instruments it is a key question whether the asset types used so far cover the entire stock of financial assets, or there are additional instruments that should be regarded as financial instruments for certain reasons, such as out of prudence, for a more comprehensive presentation of risks or due to the progress of financial and capital markets. The difference between financial and non-financial instruments is the fact that financial instruments generally represent a claim against someone; they are assets that are recognised by someone else as liabilities. Instruments based on an unconditional obligation – where the parties enter into a straightforward debtor-creditor relationship or an ownership is established (cash, credit, deposit, debt security, equity) – traditionally belong to the category of financial instruments in any case. Subsequently, financial instruments were expanded to include items ensuring accrual accounting (other accounts receivable/payable). However, financial instruments related to contingent liabilities generally give rise to statistical difficulties, as it can be problematic to capture or evaluate such instruments or identify the counterparties participating in the transaction. Previously, from this category only financial derivatives and insurance technical reserves were treated as financial instruments in the national accounts and other financial statistics.

Insurance technical reserves are financial instruments recognised on the balance sheet of a financial intermediary (insurance company, pension fund) as special liabilities (provisions, reserves); however, they are typically not recorded (recognised) by the counterparty (policyholder customer, beneficiary) as an asset, and in many cases even the insurance company does not know (because of risk pooling) to which policyholder it carries the liability; this is established by estimates in the statistics. At this time, standardised guarantees – the guarantee type closest to non-life insurance – were included in the group of financial instruments. Standardised guarantees include transactions where the undertaking institution (financial intermediary or general government) issues standardised guarantees in large numbers, usually for fairly small amounts under the same scheme, and typically – as is the case with insurance transactions – it sets aside reserves (provisions) for calls under standardised guarantees, as the probability of calls can be predicted. Methodological manuals often cite guarantees for export credit and student loans as an example for this instrument.

The revised methodology of national accounts, therefore, divided guarantees into one-off and standardised guarantees and expanded the range of financial instruments to include the latter. The guarantees to be recognised as financial instruments in the statistics are those that are likely to appear as accounting items in the balance sheet (recorded in the form of provisions on the issuer's balance sheet); thus, statisticians will not have to face difficulties in obtaining the required information. The majority of guarantees, however, are one-off guarantees (provided to institutions based on individual assessments), and the related contingent liabilities continue to be excluded from the statistics. In this sense, the methodological change should be viewed as a symbolic step toward the right direction without a significant impact on statistical indicators. Its effect can be described as follows: the transfer to be settled due to the portion – percentage – of standardised guarantees likely to be called is included in the statistics as early as the disbursement of the loan (provision of the guarantee) instead of the payment to the beneficiary only upon its calling of the guarantee. (At least, the rules of methodological standards should be interpreted in this way in the case of general government.)

In our case, reviews preceding the methodological revision found that standardised guarantees were not typical either in export credit or in student loan contracts. However, under certain housing loan schemes supported by state guarantee, private borrowers participating in the scheme are entitled to state guarantee which is treated as a standardised guarantee in the national accounts under the new methodology. Although the state keeps a record of the guarantees provided by it, due to the specificities of budgetary accounting it does not recognise provisions to cover expected payments. For this reason, statisticians need to create insurance technical reserves, which are recognised in the financial accounts as the central government's liabilities to the creditor credit institutions. The government transfer previously recorded upon the calling of the guarantee becomes a financial transaction for the payment of the reserve under the new methodology, and the transfer to the credit institutions is recorded upon the inception of the guarantee, along with the creation of the reserve. In the Hungarian national accounts, the effect of the introduction of standardised guarantees is insignificant; it modifies the net lending of general government and credit institutions only by a few billion forints retrospectively for the past few years.

Provisions for calls under standardised guarantees (AF.66)<sup>4</sup> were included in the same group as insurance technical reserves (AF.6) among the instruments of the financial accounts. The same group includes some new technical items with no relevance to Hungary, such as the claims of pension funds on pension managers or their liabilities thereto. Due to the substantive expansion of the instrument group, its description has also changed in the international methodological standards, and

<sup>4</sup> AF stands for financial assets.

is now referred to as “insurance, pension and standardised guarantee schemes”. Since the significance of the newly introduced instruments is negligible in the Hungarian practice, the previous description of the instrument group has been retained and this group is still referred to as “insurance technical reserves” in the financial accounts.

Employee stock options (AF.72) comprise another new financial instrument introduced by the methodological revision. They were classified under financial derivatives (AF.7), which were removed from the group of securities other than shares and are now presented as a separate main instrument. As a financial instrument, an employee stock option represents households’ claims against employers that offer a portion of their employees’ compensation in the form of corporate stocks. Statistical methodologies have been familiar with the concept of the employee stock option; however, they recognised only actual share allocations as a compensation of employees, upon their execution. According to the new methodology, compensation of employees must be recognised from the vesting date in the non-financial accounts and not when the option is actually exercised and, parallel to this, a matching liability of the employer toward the employee (household sector) must be recorded. The exercise (call) of the option (payment of the benefit in kind), therefore, is a purely financial transaction, i.e. the employer’s payment of the option liability. Since this instrument plays only a minor role in the Hungarian practice, no estimates have been made so far in the financial accounts for employee stock options, and the compensation of employees continues to be recorded in the non-financial national accounts in accordance with the previous methodology, upon the transfer of the shares.

The presentation of both standardised guarantees and employee stock options as financial instruments in the national accounts may be viewed as the recognition of the new recording practice that has been already introduced in many places. In several countries, the insurance technical reserves reflected in the statistics of insurance companies or other financial institutions undertaking guarantees already included provisions for the standardised guarantees granted by them, or the financial derivatives deriving from corporate reports may also have included a portion of employee stock options. The primary significance of the introduction of the new rules pertaining to these items is the fact that these instruments will not be included in future statistics occasionally.

The main substantive change affecting financial instruments (in line with the balance of payments statistics) is the recording of monetary gold (AF.11) and SDR<sup>5</sup> (AF.12) as liabilities and not only financial assets. For the most part, this eliminates the discrepancy between the net liabilities of the national economy and the net receivables of the rest of the world, which stemmed from the classification of monetary

<sup>5</sup> SDR: special drawing rights.

gold and SDR among resident assets (central banks) without being offset by any non-resident liabilities under the previous methodology. Consequently, from now on only the gold bullion held by monetary institutions as an international reserve asset will retain its specific characteristic feature, giving rise to asymmetries in the financial accounts. Under the new methodology, allocation and cancellation of SDR are achieved through transactions instead of other changes in volume as in the past. This also means that the SDR allocated by the IMF<sup>6</sup> will also become the liabilities of residents (central banks); in other words, SDR are not created from scratch but are lent to monetary authorities.

In principle, the most profound change brought about by the expansion of the range of financial instruments is the quantification of social security pension liabilities in the framework of the national accounts. While pension liabilities linked to pay-as-you-go pension schemes are still not recognised in the core national accounts according to the international statistical methodology standards, the implicit pension liabilities of social security schemes will have to be presented as supplementary data in future, along with their annual changes. All EU member states are required to submit a report on these figures from 2017 onwards, as part of their annual data transmission related to national accounts. In Hungary, the MNB assumed responsibility for carrying out the methodological and data compilation tasks related to the statistical recording of pension liabilities.

## **2. Changes in the valuation of instruments and transactions**

The methodological principle of recording the stocks of financial instruments at current market value did not change with the introduction of SNA 2008 and ESA 2010. Instrument types without a secondary market or appropriate valuation method (loans, deposits, other accounts receivable), however, must be traditionally presented at nominal value in statistics (nominal value replaces market value in their case). The change in their valuation resulting from the methodological revision lies in the fact that nominal value is now understood as gross face value; in other words, accrued interests must be added to the capital stock of each instrument. Until now, this was merely a recommendation, leaving the option of recording accumulated (accrued) interests among other accounts receivable/payable. (Since Hungary has always regarded accrued interests to be a component of interest-bearing instruments, the methodological revision did not affect its financial accounts in this regard).

<sup>6</sup> IMF: International Monetary Fund.

Thus, the instruments actually subjected to market valuation in the financial accounts are debt securities, equity, insurance technical reserves, and financial derivatives. Among the stock of shares and equities, other equity existing in a form other than share (security) did not have to be evaluated at market value even in the past; it could be recorded on the balance sheet at nominal value or book value. Now, however, the elimination of the obligation of valuation at market price represents a step backward in the valuation of another instrument of equities, unquoted shares, as well.

Previous methodological manuals for the national accounts specifically prescribed market valuation for unquoted shares; in fact, ESA 95 even provided a calculation procedure for this, although it was rarely applied. At the beginning of the 2000s, Eurostat launched a project to develop a uniform pricing practice for unquoted shares; it produced methodological documents and started to build an EU-wide database broken down by activity classes from the data of listed companies. A few years ago, however, its initiative aimed at the pricing of unquoted shares came to a halt, given the limited number of countries taking an active role in the project and the fact that few countries took advantage of its results. In addition to unsuccessful European financial account initiatives, the easing of valuation rules was the consequence of the fact that, due to the different breakdown of instruments, the boundary of instruments to be presented at market value and at book value is different in balance of payments statistics. (For the most part, unquoted shares are among FDI<sup>7</sup>, to be presented at book value. Balance of payments experts decided to apply the book value (of the issuer company) in the case of unlisted equities for the sake of consistency between the foreign direct investments of different countries.)

In Hungary, only about one percent of corporations operate as companies limited by shares, and among them, there is only one company out of a hundred whose shares are quoted on the stock exchange. (The number of companies whose shares are actively traded is even lower.) This extremely limited group of listed companies is insufficient to provide a basis for the pricing of unquoted shares and equities. The new methodological manuals permit the presentation of unquoted shares at the book value of the issuer companies' shareholders' equity in the financial accounts. Consequently, the solution applied henceforth by Hungary and several other countries has been accepted even at the level of methodological recommendations, and the methodological difference between the financial accounts and the international investment position statistics of the balance of payments has been eliminated. At the same time, this rendered the category of revaluation all the more unreasonable in the case of unlisted equities, which became a technical item trying to create a link between the differently valued stocks and transactions.

<sup>7</sup> FDI: foreign direct investments.

Methodological manuals still fail to address two, seemingly negligible items with respect to shares: what to do with repurchased own shares (can the issuer company have a claim against itself) and negative own funds (can the claim have a negative price and stock value). In reality, the (negative) answers can be derived from general methodological rules; however, different statistical areas apply different solutions for practical reasons. It would have been worthwhile to lay down these rules, as well, in the manuals.

However, it is a step forward that, in the preparatory phase of the methodological revision, a separate working group was designated to develop proposals about changing the valuation of loans. It appeared as though the working group succeeded in shifting from the practice of recording loans at nominal value by allowing loan stock statistics to reflect the effects of changes in market interest rates and the uncertainty of repayment. Obviously, a revision of the pricing of stocks would have called for the reconsideration of the contents of transactions, earnings (property income) and write-offs; in addition, changing the valuation of loans could have also set off the reform of the valuation of other instruments without a secondary market. However, the statistical community was unprepared for a conceptual shift of this magnitude at this time. (In the case of unquoted shares, the obligation of market valuation has just been revoked). Thus, ultimately, the previous regulation pertaining to the valuation of loans prevails in core accounts and balance sheets, while it has become possible to present bad loans at net value in the supplementary table.

The reinforcement of previous loan valuation rules also implies that international institutions will be even more determined to ensure that individual countries comply with the rules concerned. This, however, is a daunting task sometimes; indeed, data suppliers themselves tend to revalue their claims, and special statistical reports are required to provide data regarding the original (gross) amounts, nominal values. Beyond technical obstacles, a form of methodological resistance may also have been behind the disregard for the rules in the case of some statisticians. In this respect, the question arises about the extent to which a basic principle of statistics (i.e. it is not permitted to record assets or liabilities the recovery of which is unlikely) is adhered to. Why are some loans still recorded in statistics at original face value when it is obvious that they will not be repaid (in full) in any case? In addition, some of them are now accompanied by a new, artificial instrument in the form of standardised guarantees, which has to be set aside as early as disbursement (borrowing) in recognition of the fact that the loan will not be recovered. (This is why a financial institution with accounting losses only receives transfers; for statistical purposes such an institution does not incur a loss at all as it recognises the loan in its original state until it is repaid or written off). Hopefully, these contradictions will be eliminated at the next methodological revision 15 years from now.

### 3. Delineation between financial and non-financial transactions

In our case, the most significant and far-reaching methodological change affecting data content is the different recording of return into the public pension scheme from private pension funds in the national accounts. The recording problem is caused by the fact that pension liabilities may not be presented in the statistics in the social security pension schemes – this is permitted under the new methodology only in a segregated manner, in the form of supplementary data –; therefore, pension liabilities accumulated in corporate or financial intermediary pension funds cannot be transferred to general government upon the return of members or when the state takes over the corporate pension fund reserves. Upon the transfer of assets, all existing pension liabilities (insurance technical reserves) must be eliminated, utilised or written off, as they cannot be interpreted in the system of national accounts in the case of general government. The mismatches resulting from the different statistical treatment of the two types of pension schemes cannot be fully resolved; data in the national accounts will be biased inevitably. The question is whether this bias should be incorporated concentrated in time or spread out retrospectively or in advance. Previous methodological standards recommended one of these possible options, while the new standards prescribe a new solution.

According to the previous national accounts methodology, the government's takeover of pension fund reserves upon exits from employer or private pension funds was recorded as a one-off capital transfer to general government, which increased the net lending of general government (reduced government deficit), and reduced the net lending of the sector (corporations or households) providing the transfer. Under the new methodological rules (assuming that the funds are in balance), the transfer of wealth cannot affect the balances of sectors at the time of the exit, and other accounts payable (AF.89) to households with an amount corresponding to the assets taken over must be recorded in general government's balance sheet. These amounts must be decreased in the form of current transfers during subsequent pension disbursement periods. This means that, instead of the previous, concentrated effect, the effect on net lending will now materialise in the accounts of households and general government spread over time.

Since general government's other accounts payable are not part of the consolidated, gross government (Maastricht) debt (measured at face value), the change in the recording practice will have no effect on the statistical public debt ratio. At the same time, the recording of other accounts payable reduces the net financial worth of general government, which has the opposite effect on households' net financial worth. The new recording practice eliminates the drastic, one-off net lending or net borrowing of households and general government at the time of the asset transfer, and the

extreme jump (level shift) in the net financial worth of the two sectors also disappears. Indeed, the incorporation of other accounts payable offsets the stock of the financial instruments taken over in the balance sheet of the central government, while the corresponding amount of other accounts receivable replaces the loss of insurance technical reserves in households' balance sheets. Therefore, these new other accounts receivable/payable behave as if social security pension liabilities were recorded in general government's balance sheet, while methodological manuals emphasise the non-existence of such an item, pointing out that this is only a prepayment, arising from the fact that households have paid their pension contributions into the central budget in advance.

According to the previous methodological standards, a capital transfer of HUF 2 856 billion was recorded in domestic statistical accounting in the wake of pension fund asset transfers between 2009 and 2013 which, in this period and particularly in 2011, increased the net lending of general government and reduced that of households. Under the new methodology, a corresponding amount of other accounts payable was recorded for general government vis-à-vis households. According to the new model, the accounts payable will be reduced in annually increasing amounts during a period of 35 years, offset by current transfers. Other accounts receivable/payable are generally short-term, technical instruments in the financial accounts, intended to serve accrual accounting, i.e. to bridge the timing differences between economic events and their financial settlement. No interest income is recorded for such technical items in the national accounts. The present case, however, involves a rather long-term instrument, and its value is preserved by recording, in line with the methodological standards, an interest income on the amount in question. Households receive this amount from general government (on the non-financial account) and reinvest it (on the financial account) on a continuous basis. Due to their significance, other accounts payable/receivable as well as their changes are also presented separately as memorandum items in the Hungarian publications of the financial accounts.

The more accurate definition of the content of property income also affects the delineation between financial and non-financial transactions. It is a step forward that methodological manuals have made it clear: the owners of investment/mutual fund shares are entitled to the income earned by the funds on their assets and investments (reduced by operating costs) even if such incomes are not paid out in the form of dividends (i.e. the reinvested income must be recorded). Although this was reflected in the methodology even in the past, in many cases the national accounts and balance of payments statistics did not include the required corrections. From now on, it will be easier to identify incomes and to control their recognition in statistics as a new income category was created in the new standards for the presentation of the income of mutual fund shares, divided into dividend and reinvested earnings.

Beyond clarifying the income of investment fund shares, some changes affect the definition of the property income of shares and other equity. The concept of superdividend applied in balance of payments statistics and general government statistics has been extended to all ownership linkages, i.e. to all holder sectors and all investment forms. Super- or extraordinary dividend is the portion of the dividend that is not covered by the operating surplus of the current year but paid from the profits of previous periods retained in the company. Statisticians must separate this excess dividend and record it as a withdrawal of equity rather than property income (i.e. transfer this amount from the non-financial to the financial account). As a result, statistics will reflect less dividend than voted by the shareholders of the companies, property income will be capped and brought more in line with the after-tax or the operating profit. However, owing to conceptual uncertainties, hard-to-interpret rules and the data and resource intensity of calculations, it does not appear likely that many countries will opt for extending the separation of the superdividend to other holder sectors beyond the rest of the world and general government. The conceptual uncertainties are caused by the slightly different definition of the superdividend in the balance of payments statistics and general government statistics, and this ambiguity persisted even after the methodological revision. The basis on which current year dividend is reclassified into withdrawal of equity is ambiguous: should this dividend be an outlier relative to the company's result in the previous year or relative to the usual dividend payment?

Although the modification of the statistical rules of dividend accounting was aimed at standardisation, the results might appear to be merely symbolic. In principle, the application of the category of superdividend limits the dividend income presented in statistics to the level of earnings (the withdrawal of the surplus becomes a financial transaction). However, dividend remains to be a form of property income that is due and payable upon the shareholders' vote. Despite the promising initiatives, beyond FDI, the concept of reinvested earnings was not extended to other ownership/equity linkages. Under the new methodology, companies remain to be institutional units entitled to do business independently and as such, they have a right to retain their profits; shareholders are not entitled to the profits automatically. In this regard, reinvested earnings on foreign direct investment are an exception; those formulating the standards were unable to convince decision-makers to accept a general definition of and relevant rules for additional exceptions that arose, such as the reinvested earnings of government-owned (public) companies. The general application and extension of the category of reinvested earnings to all companies and shareholders would require a complete reconsideration of the concepts of institutional independence and shareholders' income, which was beyond the scope of the latest revision period.

#### 4. Changes in the content of economic sectors

The delineation between the sector of financial (S.12)<sup>8</sup> and non-financial (S.11) corporations in the national accounts produced in compliance with the new methodology has changed (through reclassifications – substantive change), and the financial corporations sector is now presented in greater detail, broken down into more sub-sectors in the statistics (structural change). Regulations have been tightened regarding the content of the government sector and accordingly, as a result of organisational reclassifications from the corporate sectors, the range of institutions classified into the general government sector has been expanded. Sector changes affect financial and non-financial accounts alike; however, institutional reclassifications due to methodological reasons influence financial wealth and debt ratios more significantly, with a more pronounced effect on financial accounts.

Under the new methodological standards, the group of financial services in the statistical sense and, consequently, the contents of the financial corporations sector have been expanded. Contrary to earlier practice, in addition to the financial intermediaries connected to the public, corporations providing financial services to a limited group of clients, typically within a corporate group, must also be regarded as financial corporations in the new statistics. These corporations must be reclassified from the non-financial corporations sector to the financial corporations sector. A holding or group financing company that engages in passive financial intermediation within the corporate group – and qualifies as an independent institutional unit – must be classified into the category of captive financial institutions (S.127), a newly created sub-sector within the financial corporations sector. SPEs<sup>9</sup> that are in relationship solely with non-residents and fulfil passive financial intermediary functions among non-resident corporate group members have been transferred from non-financial to financial corporations. The reclassifications entail a decline in the stock of financial assets and liabilities of the non-financial corporation sector, and a corresponding increase in the financial assets of financial corporations in the financial accounts.

In our case, the sectoral changes are primarily reflected in the financial accounts that include SPEs. A half of the financial assets and nearly a third of the financial liabilities of the non-financial corporation sector are transferred to the financial sector, with the creation of a new sub-sector (captive financial institutions) corresponding in size to the credit institution sub-sector. This is the most large-scale and most remarkable change in the Hungarian financial accounts statistics engendered by the methodological revision. The significant shift in wealth can be attributed to the fact that certain companies (SPEs) of substantial financial wealth operating in Hungary

<sup>8</sup> S stands for institutional sector.

<sup>9</sup> SPE: special purpose entity.

and providing passive financial intermediation between non-resident counterparties were regarded as non-financial corporations under the previous methodological standards.

Figure 1. Liabilities of financial (S.12) and non-financial (S.11) corporations sectors (including SPEs) in percentage of GDP according to the previous and the new methodology

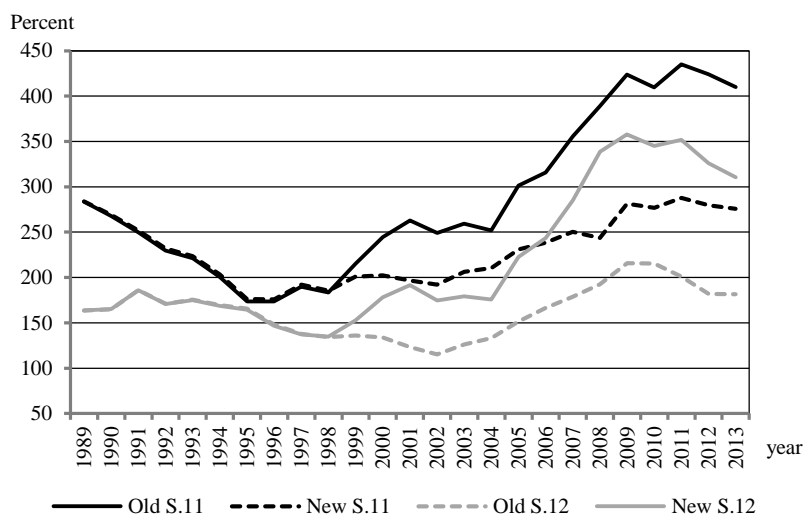
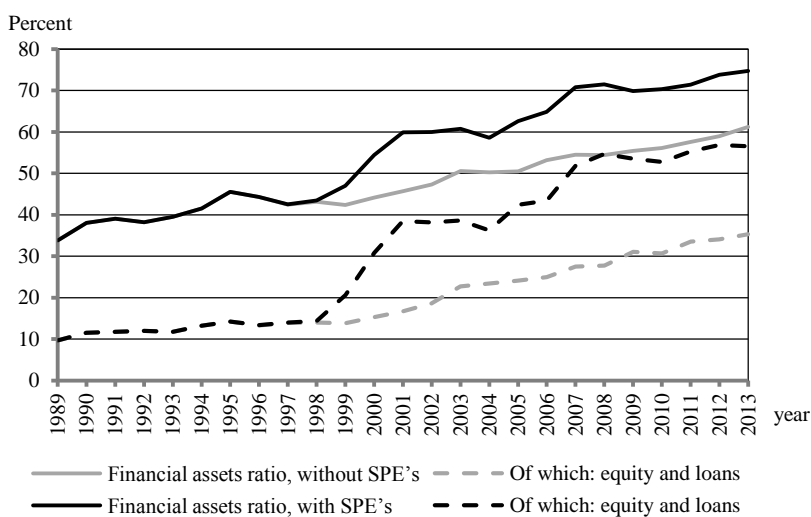


Figure 2. Financial assets of non-financial corporations in percentage of liabilities in financial accounts according to the previous methodology, with and without SPEs



Looking at the 25-year corporate time series, it is apparent that financial assets represent an increasingly large share within the assets of non-financial corporations over time. The gaining ground of the balance sheet structure characterising financial intermediaries in the non-financial corporate sector (which, by definition, offers products rather than financial services) is attributable to the increasing prominence of intercompany lending and the strengthening of ownership linkages among non-financial corporations. In recent decades, numerous groups and ownership chains have emerged where a part of the member companies perform holding or group financing activities, and their function within the group became the holding of other companies or the provision of credit. As they are not connected to the public, they do not need a license for performing financial activities and as such, these companies were not – and still are not – considered to be financial intermediaries in the methodology of national accounts. While previously only financial intermediaries and financial auxiliaries belonged to the sector of financial corporations, as a result of the methodological revision, now other financial service providers constitute a part of the sector as well.

In reality, previously published methodological manuals did not offer any guidelines with respect to the definition of an economic sector for captive financial institutions or companies with passive financial functions. One of the accomplishments of the revised methodological standards is the effort to define these special institutions and to provide rules regarding their sectorisation. To put it simply, under the new regulation companies that predominantly hold financial instruments and do not provide any services other than financial services are to be considered financial corporations. Thus, the methodological standards reinforce the sectorisation practice already existing in several countries. Policy-makers may have thought that they had cleansed the sector of non-financial corporations from the provision of financial services and the related financial instruments and property incomes. In addition, these special activities and institutions do not even disturb the presentation of traditional financial intermediation, as they are included in an independent sub-sector (captive financial institutions) within the sector of financial corporations.

However, they failed to consider the consequences of the sectoral realignment thoroughly; indeed, the countries affected faced – and will face – these consequences belatedly, upon the application of the prescribed rules. As a negative effect, the reclassification breaks up the group of companies previously included in the same sector, and numerous companies are now considered to be independent institutional units when they should not be, as they have no real economic activity and function as mere passive owners or money channels of a group. While the corporate sectors are limited to market producers, an independent sub-sector was created for companies that are obviously non-market producers, and their production, output and value added cannot even be measured. It is done at a time when the use of consolidated

corporate accounting data has gained ground in the statistics, along with group formation and the consolidation of auxiliary units that serve central units or corporations with an output. In addition, the weight of mixed function corporations – those functioning as money channels inseparable from the company while also performing normal production or service provision activities – has increased as well. Thus, despite all good intentions and insights, the methodological revision does not necessarily mitigate the differences between the sectorisation practices of individual countries. Some countries will classify holding or group financing corporations into the sector of financial corporations, while others – in the lack of registers and specific data – will not be able to do so.

The new international methodological standards break down the financial corporations (S.12) sector into nine sub-sectors instead of the previous five, with the level of detail of other economic sectors remaining unaltered. Within the sub-sectors of financial corporations, the central bank (S.121) sub-sector and the financial auxiliaries (S.126) sub-sector correspond to the former ones, while each of the previous sub-sectors of other monetary institutions, other financial intermediaries and insurance corporations and pension funds is now broken down into two sub-sectors. In addition to the former sub-sectors, captive financial institutions (S.127) have been added as a new sub-sector. The more detailed sectoral breakdown of the financial corporations sector provides an opportunity to present and analyse the assets and liabilities of various mutual funds segregated from other institution groups, and similarly, the data of insurance companies and pension funds are presented separately in the financial accounts.

There are mandatory and optional categories to be used for the purposes of international data transmissions both in the areas of sectorisation and in the breakdown of instruments. It was possible to present the previous financial corporations sector with three consolidated sub-sectors instead of five sub-sectors, if a country chose to compile its national accounts according to the minimum level of detail. Similarly, the new data supply requirements can be met by presenting six – more consolidated – sub-sectors instead of nine. In the Hungarian financial accounts, however, financial sub-sectors are presented at the maximum level of detail, providing ample opportunity for data analysis and the verification of data quality. It is a particularly remarkable achievement that separate categories were created for such different institution groups as money market mutual funds and credit institutions as well as other (non-money market) investment funds and other – typically creditor – financial intermediaries. At long last, it has become possible to examine the financial wealth, investment and financing processes of credit institutions or various investment funds separately, based on consistent data included in the financial accounts.

By tightening the so-called 50 percent rule intended for the segregation of market and non-market producers, and by including corporations providing services solely

to the government in general government sector, the ESA 2010 and the Manual on Government Deficit and Debt expanded the range of institutions belonging to the general government sector. In addition, the manuals stipulate specific sectorisation rules for a number of special financial and non-financial organisations (bad banks, strategic stock holding organisations, state holding companies, guarantee undertakers, certain non-profit organisations, etc.). The application of the new rules increases the number of financial and non-financial corporations and non-profit organisations included in general government; their net borrowing alters the government deficit, and the debts of the reclassified organisations increase the Maastricht debt of the government sector.

Even the previous methodological manuals included recommendations about breaking down the data of corporate sectors by main owner sector. Within the sectors of financial and non-financial corporations, this provided an opportunity to generate and publish the accounts of company groups in majority government ownership as well as those held by non-residents and private sectors. The new methodological standards attach special significance to the national accounts of companies owned (directly or indirectly) by general government, as they allow for the presentation and analysis of the public sector as a whole, in addition to general government (government sector). In line with the recommendation, the MNB has commenced the compilation of the annual financial accounts of public companies.

## **5. Changes linked to the general data revision of financial accounts**

It is a basic requirement of national accounts statistics to have long, homogeneous time series available for users. With that in mind, the entire length of the time series must be updated to reflect the effects of the methodological revision, the separation or reclassification of sectors and instruments and the effects of the changes in valuation or recording principles. For the purpose of this exercise, previously used data sheets must be re-examined with the possible inclusion of additional data sources, and all calculations and estimates underlying the published time series must be repeated (in more detail or in a different breakdown). This provides a good opportunity to perform any data revisions necessitated by other reasons, and to incorporate the results of other enhancements into the statistics. Thus, simultaneously with the implementation of the changes to the international methodological standards, new data sources will also be incorporated and data corrections will be carried out, along with the revision of the estimation and calculation procedures used in the financial ac-

counts. This comprehensive data revision affected the time series of all economic sectors, especially those of households, non-financial corporations and the rest of the world.

Since neither the financial accounts nor the underlying statistics include direct data collections pertaining to households, the stocks and flows of households' financial assets and liabilities are estimated by relying on the data supplies of financial intermediaries or counterparty sectors. The greatest deficiencies observed affect the coverage of households' foreign financial instruments (issued by non-residents or held abroad); indeed, in this case it is not possible to request information directly from non-resident counterparties in order to obtain data for measuring the financial assets of resident households. Parallel to the methodological revision, the results of some enhancements have also been incorporated, including those allowing for a more comprehensive presentation of data pertaining to resident households' holdings of foreign currencies, foreign bank deposits and foreign equities in balance of payments statistics and the financial accounts. The aggregated stock of bank deposits held abroad is calculated on the basis of foreign banks' data (obtained from foreign central banks) pertaining to Hungarian households. The stocks and flows of households' foreign direct investments (shares, other equities) are defined based on the foreign dividend income shown in the annual personal income tax returns. Despite the recent enhancements, the coverage of the foreign financial assets and liabilities of Hungarian households in the financial accounts is still not complete; however, significant results have been achieved with respect to the monitoring of these instruments and consequently, the financial assets of households presented in Hungary's statistics increased by hundreds of billions of forints.

In addition to households' foreign financial instruments, data on loans granted/borrowed by households to/from non-financial corporations as well as estimates on equity held by households have also changed. Loans outstanding more than tripled based on the recalculations, and loans extended by households to their companies amount to HUF 900 billion compared to the previously estimated HUF 250 billion. The equity investments of households in resident companies have been defined with more precision primarily on the basis of flow data derived from end-of-year stock data through complex calculations at the corporate level. More intense utilisation of corporate annual reports and corporate tax return as well as more accurate calculation procedures improved the quality of the presentation of households' assets and liabilities vis-à-vis non-financial corporations. Along with the data of financial instruments, their property incomes presented in non-financial accounts changed as well.

The more complete use of administrative corporate data sources (tax returns, annual reports) and data corrections allowed for a more accurate distinction and estimation of intercompany loans, equity and other accounts receivable of non-financial corporations. Although the level of intercompany assets and liabilities does not im-

pact the balancing indicators, they affect gross data, financial wealth and debt figures; therefore, the quality of such data is important. Intercompany loans did not change significantly as a result of the data revision; however, the separation of long-term and short-term loans has been achieved, which rendered the maturity breakdown of corporate accounts more accurate. (Previously, all intercompany loans were included in the short-term category). The stock of intercompany trade credits and advances increased in general; however, data were revised downward for certain years due to the correction of reporting errors.

Besides the methodological revision and data correction, changes in data pertaining to the rest of the world and the total economy can be attributed to the fact that the previously existing technical discrepancies between the balance of payments statistics and the financial accounts have been eliminated. Consistency between the two types of statistics has improved with regard to the applied instruments as well.

## **6. Changes in the presentation of data and the scheduling of the data dissemination**

Hungarian financial accounts statistics are essentially available on the MNB's website in the form of quarterly time series starting from 1990. Data are updated on a quarterly basis: preliminary financial accounts are prepared regarding the financial assets and financing of households and general government for the 1.5 months following the current quarter; the comprehensive set of financial accounts for all sectors are available three months following the current quarter. There are no separate, annual statistics; annual accounts are generated from quarterly data.

The effects of the methodological revision and the comprehensive data revision were first reflected in Hungarian financial accounts in the comprehensive data release for the 1<sup>st</sup> quarter 2014. Starting from the publication of the comprehensive financial accounts for the 1<sup>st</sup> quarter 2014, the data release deadline changed from the first working day of the fourth month following the reference period to the last working day of the third month following the reference period. At the same time, the publication dates for the preliminary financial accounts pertaining to the general government and households remained unchanged. It was the earlier publication of the quarterly balance of payments statistics – i.e. the main data source – that allowed for the earlier compilation of the full set of financial accounts. If the lead time was reduced further, financial accounts statistics would be released earlier than the non-financial accounts of the national accounts, which would not ensure harmonised data dissemination. This would be particularly problematic in the case of the March and

September publications, which overlap with the compilation and dissemination of the EDP<sup>10</sup> notification – that relies on both parts of the national accounts –, and usually require last-minute data reconciliations and corrections.

The structure of the published tables was subject to minor changes in the wake of the methodological revision and the comprehensive data revision, with the introduction of the sectoral and instrument breakdown presented in the time series and summary tables, in line with the new methodological requirements described earlier. The time series tables remain the backbone of the publication, showing stocks and flows of financial assets and liabilities broken down by economic sector. As a novelty, in addition to quarterly time series, annual time series are also published. In addition to general tables presenting an instrument breakdown equally applicable to all sectors, detailed financial accounts are produced for the sectors of households, general government and non-financial corporations, with a more detailed breakdown – by type, counterparty or currency – of the assets and liabilities specific to the given sector.

While international institutions require financial accounts with the inclusion of resident SPEs, in line with the balance of payments statistics, normal financial accounts (excluding SPEs) are in the core of Hungarian data disclosures. Nevertheless, as another change compared to previous publications, in addition to the presentation of the normal quarterly data tables, versions including SPEs for all time series tables will also be available. (Previously, only annual cross-tables were released from the data that included SPEs.) For the purposes of transparency and data protection, normal tables not including SPEs present the sub-sectors of other financial intermediaries (S.125), financial auxiliaries (S.126) and captive financial institutions (S.127) in a consolidated fashion under the heading “other financial corporations”. (The more detailed breakdown of the sector of financial corporations may lead to the presentation of protected individual data – especially in the case of a detailed breakdown of counterparty sectors and instruments –; therefore, the level of detail should be restricted for data releases.)

## 7. Summary

The latest revision of the methodological standards of national accounts did not entail fundamental changes in the balancing indicators of the financial accounts. In Hungarian statistics, the only significant change in main indicators resulted from the modified recording of the asset transfer of private pension funds to the government.

<sup>10</sup> EDP: excessive deficit procedure.

The effect of the methodological revision is primarily reflected in the increased level of detail, which provides an opportunity for more broad-scale use of the financial accounts. Naturally, the expansion and more detailed presentation of the data released could be implemented at a country's own initiative, even without an international methodological revision; however, the methodological revision guarantees that the detailed breakdown of data is consistent with the concepts and categories applied by the rest of the countries, ensuring comparability between the statistics at the level of details as well. In addition to technical or presentation-type changes, the revision of the standards brought to the surface numerous pressing substantive or methodological issues. Among them, redefining the category of financial services activities and modifying the delineation between financial and non-financial corporations exerted the most significant impact on the data presented in the financial accounts. As a positive development, among other things, the new manuals pointed out the significance of measuring and presenting implicit social security pension liabilities and bad loans and, if only in the form of memorandum items, these figures have become a part of the data underlying the national accounts.

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