Financing and financial investment of the non-financial sectors in the euro area

In this issue of the Monthly Bulletin the ECB is publishing, for the first time, quarterly financial accounts data for euro area non-financial sectors. At present, these data cover the period from the fourth quarter of 1997 to the second quarter of 2000. This article provides an overview of the methodological framework underlying the new Table on Financing and Investment (TFI) and analyses the structure and the development of the main financing and financial investment components of the non-financial sectors in the euro area.

Over the period under review, the financing needs of the non-financial sectors grew steadily, at annual rates of around 6%. While the demand for funds on the part of general government was relatively subdued, more significant increases in financing needs were seen in the private sector, notably in the household sector. On the financial investment side, the private sector favoured long-term assets, in particular mutual fund shares, quoted shares and insurance products, partly reflecting the increasing need to provide for retirement. The large net acquisitions of quoted shares and mutual fund shares were accompanied by rising stock market prices, resulting in substantial increases in financial assets.

1 Introduction

In this issue of the Monthly Bulletin, the ECB is publishing, for the first time, quarterly financial accounts data. These data provide an overview of the financial transactions and amounts outstanding of the non-financial sectors in the euro area. The data are based on euro area banking and securities issues statistics, government finance statistics, quarterly national financial accounts, and BIS international banking statistics. While all 12 countries participating in the euro area contribute to the euro area statistics, Ireland and Luxembourg do not as yet provide quarterly national financial accounts data. The data currently available cover the period from the fourth quarter of 1997 to the second quarter of 2000.

The new data presented in the TFI are based on a statistical framework which is described in the "European system of national and regional accounts in the Community (the ESA 95)".[1] Three elements essentially constitute this framework: 1) the grouping of economic agents into economic sectors; 2) the selection of the financing and financial investment components; and 3) the relationship between stocks and transactions.[2]

- In the TFI, the euro area economy is assumed to consist of two main groups of sectors, namely the non-financial sectors (general government, non-financial corporations, and households including non-profit institutions serving households) and the financial sectors (Monetary Financial Institutions (MFIs), other financial intermediaries including financial auxiliaries, and insurance corporations and pension funds).

- The new statistics focus on the financing and financial investment activities of the non-financial sectors, covering most of the liability and financial asset categories defined in the ESA 95. These are currency and deposits, loans, securities other than shares (excluding financial derivatives), shares (excluding unquoted shares) and certain insurance products (referred to as "insurance technical reserves" in the ESA 95, since they constitute the provisions of pension funds, insurance and non-financial corporations to cover the claims of policy holders). In essence, these instruments are those which are either mediated through financial corporations to non-financial sectors or traded on capital markets.[3]

1 *Council Regulation (EC) No. 2223/96 of 25 June 1996 on the European system of national and regional accounts in the Community (the ESA 95).*
2 *For more details, see the related methodological note on the ECB's website at http://www.ecb.int.*
3 *Information on other financial instruments (financial derivatives, unquoted shares, equity other than shares and other receivables and payables) is not available. The same applies for loans granted by general government and non-financial corporations.*

- The outstanding liabilities and assets constitute the "stocks" in the framework of the financial accounts. "Financial transactions" reflect the financing and financial investment decisions during the quarter. Changes in outstanding amounts are the result of such transactions, but also of revaluations and other changes, such as write-offs or write-downs of loans, and reclassifications between liability and financial asset categories and sectors.

The detailed data are shown in Table 6.1 of the "Euro area statistics" section.[4] Table 1 provides an overview of these data. It shows the main items under the financing and financial investment of the non-financial sectors in terms of amounts outstanding as at mid-2000.

4 Table 6.2 of the "Euro area statistics" section of this issue of the Monthly Bulletin provides some annual data on saving, investment and financing in the euro area as a first step towards more comprehensive sectoral accounts data based on the ESA 95. However, these annual data cannot yet be reconciled with the quarterly financial transaction data as shown in Table 6.1.

Table 1

Financial investment and financing of non-financial sectors in the euro area at mid-2000 [1)]

(amounts outstanding)

Main financial assets	EUR billions	%	Main liabilities	EUR billions	%
Total	**14,535**	**100.0**	**Total**	**15,526**	**100.0**
Currency and deposits	**4,897**	**33.7**	**Loans**	**6,951**	**44.8**
Currency	341	2.3	a) taken from		
Deposits with	4,556	31.3	Euro area MFIs	6,261	40.3
Euro area MFIs	4,405	30.3	Other financial corporations	690	4.4
Non-MFIs	150	1.0	b) granted to		
Securities other than shares	**1,592**	**11.0**	General government	885	5.7
Short-term	161	1.1	Short-term	42	0.3
Long-term	1,432	9.8	Long-term	844	5.4
Shares [2)]	**4,908**	**33.8**	Non-financial corporations	2,994	19.3
Quoted shares	2,952	20.3	Short-term	1,088	7.0
Mutual fund shares	1,956	13.5	Long-term	1,905	12.3
o/w Money market fund shares	221	1.5	Households [3)]	3,072	19.8
Insurance technical reserves	**3,138**	**21.6**	Short-term	274	1.8
Net equity of households in life			Long-term	2,798	18.0
insurance reserves and pension			**Securities other than shares**	**4,003**	**25.8**
funds reserves	2,829	19.5	General government	3,600	23.2
Prepayments of insurance			Short-term	425	2.7
premiums and reserves for			Long-term	3,175	20.4
outstanding claims	309	2.1	Non-financial corporations	403	2.6
			Short-term	91	0.6
			Long-term	312	2.0
			Quoted shares		
			issued by non-financial corporations	**4,157**	**26.8**
			Deposits		
			liabilities of central government	**148**	**1.0**
			Pension fund reserves		
			of non-financial corporations	**267**	**1.7**

Source: ECB.
1) Non-financial sectors comprise general government, non-financial corporations and households including non-profit institutions serving households.
2) Excluding unquoted shares.
3) Including non-profit institutions serving households.

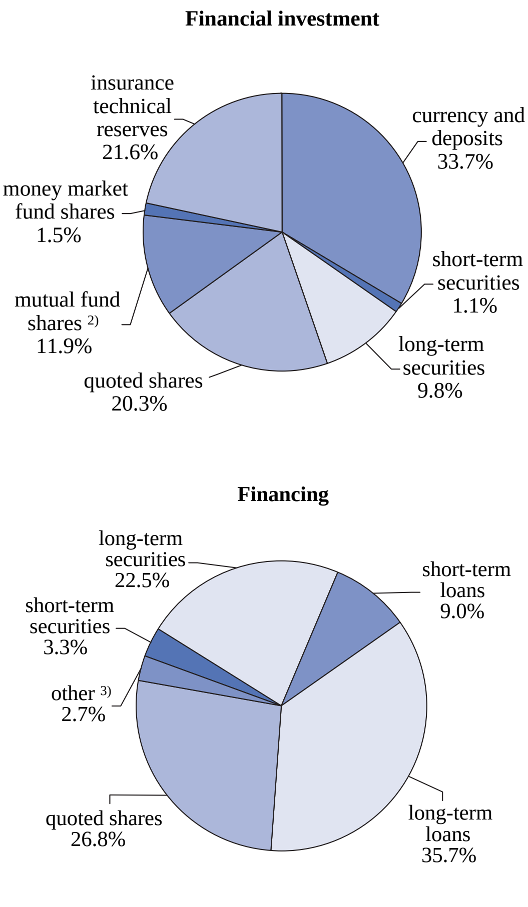
2 The financial balance sheet of the non-financial sectors in the euro area

The main financial assets shown in Table 1 amounted to €14,535 billion (around 230% of annual GDP in the euro area) in mid-2000. Securities, including quoted shares, accounted for nearly half of this figure, and currency and deposits for one-third. Insurance technical reserves represented one-fifth of the main financial assets covered in the table (see Chart 1).

Chart 1

Financial investment and financing of non-financial sectors in the euro area at mid-2000 [1)]

(amounts outstanding of the main components as a percentage of total)



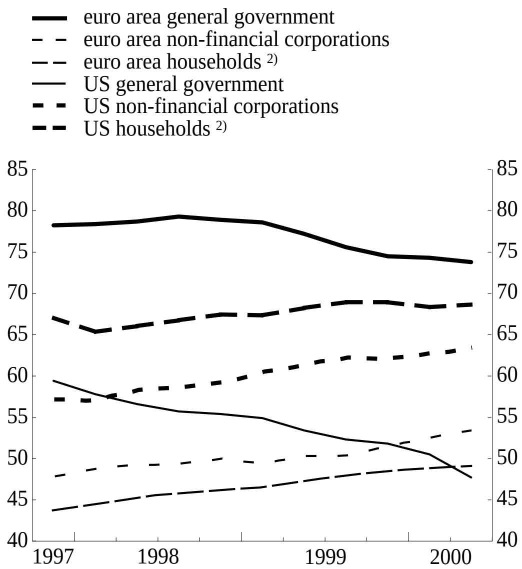
Source: ECB.

1) *Non-financial sectors comprise general government, non-financial corporations and households including non-profit institutions serving households.*
2) *Excluding money market fund shares.*
3) *Deposit liabilities of central government and pension fund reserves of non-financial corporations.*

Chart 2

Debt of non-financial sectors in the euro area and in the United States [1)]

(amounts outstanding as a percentage of annual GDP, end of period)



Sources: ECB and Federal Reserve Board.

1) *Non-financial sectors comprise general government, non-financial corporations and households including non-profit institutions serving households.*
2) *Including non-profit institutions serving households.*

The main liabilities shown in Table 1 amounted to €15,526 billion (250% of GDP) in mid-2000. Securities, including quoted shares, comprised more than half of the financing sources of the non-financial sectors, and loans around 45%. Most of the funding (almost 90% of the liabilities) was at maturities exceeding one year.

The data also allow debt aggregates to be compiled for each of the non-financial sectors, namely general government, non-financial corporations and households. Debt comprises the liabilities as shown in Table 1, excluding quoted shares issued by non-financial corporations. In the euro area, debt incurred by non-financial sectors was equal to around 180% of GDP in mid-2000. This ratio is similar to the corresponding ratio in the United States. The sectoral detail showed lower debt ratios for the private sectors in the euro area than in the United States (see Chart 2).

By contrast, the ratio of general government debt to GDP was higher in the euro area than in the United States. In mid-2000 the respective ratios stood at 75% in the euro area and 48% in the United States, following a much faster reduction in the United States than in the euro area during recent years. In terms of liability categories, the debt structure of the non-financial sectors was broadly similar, with around 60% of loans and 40% of securities, both in the euro area and in the United States. While general government financing in the United States was mainly based on long-term securities, private debt primarily consisted of bank loans.

3 Financing of the non-financial sectors

Table 2 summarises the development between the last quarter of 1998 and the second quarter of 2000 in financing in the euro area economy across sectors, by liability category and maturity, and shows whether the financing was provided by MFIs or by other sectors. For all these breakdowns, Table 2 provides information on types of transactions, specifically their ratios to GDP, and their annual growth rates.

As can be seen from the table, the financing needs of the individual non-financial sectors, and the extent to which their requirements for funds have been satisfied, have grown steadily, although at different rates. The annual rate of growth in the main financing components fluctuated at around 6% within a very narrow range of less than half a percentage point. In the case of general government, growth rates fluctuated between

Table 2

Financing of non-financial sectors in the euro area [1)]

	Main financing components												
		Financing of general government					Financing of non-financial corporations					Financing of households [2)]	
			Loans		Securities other than shares			Loans		Securities other than shares	Quoted shares		Loans taken from euro area MFIs
				Taken from euro area MFIs		Held by euro area MFIs			Taken from euro area MFIs				
Ratio to GDP [3)]													
1998 Q4	12.6	2.5	-0.1	0.0	2.5	0.7	6.2	3.8	3.3	0.5	1.7	3.8	3.6
1999 Q4	12.5	1.7	-0.2	0.0	1.8	1.4	6.6	4.3	3.5	0.8	1.3	4.2	3.9
2000 Q1	12.7	1.5	-0.2	0.0	1.7	0.3	6.9	4.7	3.6	0.5	1.5	4.3	4.1
Q2	13.3	1.7	-0.3	0.0	1.8	-0.3	7.4	4.8	3.5	0.7	1.6	4.2	4.0
Annual growth rates													
1998 Q4	6.2	3.4	-0.5	0.0	4.5	3.3	7.4	9.3	9.1	8.7	5.1	9.0	9.3
1999 Q1	6.3	3.6	0.4	1.3	4.2	5.7	6.8	9.3	9.8	9.7	4.1	9.8	10.1
Q2	6.1	2.8	0.0	0.7	3.6	2.1	6.9	10.3	10.2	11.3	3.2	10.3	10.6
Q3	6.1	2.0	-1.9	-0.3	3.0	5.1	7.7	9.9	9.7	13.9	4.6	9.9	10.0
Q4	5.8	2.3	-1.3	0.3	3.1	7.0	7.0	10.1	9.3	14.1	3.1	9.4	9.7
2000 Q1	5.9	2.0	-1.5	0.0	2.9	1.8	7.3	11.2	9.9	9.3	3.4	9.7	10.0
Q2	6.1	2.3	-1.8	-0.3	3.2	-1.5	7.4	11.3	9.4	13.3	3.4	9.3	9.6

Source: ECB.

1) *Non-financial sectors comprise general government, non-financial corporations and households including non-profit institutions serving households.*

2) *Including non-profit institutions serving households.*

3) *Sum of quarterly transactions (T) as a percentage of sum of quarterly GDP; compiled as* $100*(T+T_{-1}+T_{-2}+T_{-3})/(GDP+GDP_{-1}+GDP_{-2}+GDP_{-3})$.

2% and 3½%, and in the case of households and non-financial corporations within ranges of around 9-10½% and 6½-7½% respectively.

The relatively low and declining pace at which the general government's financial needs expanded mainly mirrors the reduction in fiscal deficits. There was, in fact, a decrease in loans granted to general government.

The high demand for funds on the part of households and, to a lesser degree, non-financial corporations generally reflected the rebound in economic activity in the course of 1999 and the high level of industrial and consumer confidence in the euro area. Moreover, the gross saving of the private sector has declined over recent years while gross fixed capital formation has continued to rise, thereby increasing the demand for financing. Furthermore, in the case of households, whose gross borrowing requirements have expanded at a significantly higher pace than those of non-financial corporations, the need for financing may also be associated with a strong demand for housing finance and, possibly, with purchases of long-term financial assets.

The broader aggregates are more stable than their components, since a great deal of financial substitution took place within them. This is particularly apparent in Table 2, where the financing aggregates of the general government and the non-financial corporations are compared with those referring exclusively to the financing taken from the MFI sector. The latter clearly present more volatile patterns.

Moreover, trends differ among the components. In the context of a declining need for funds, governments have moved away from borrowing from MFIs in favour of securities issues largely taken up outside the MFI sector. As regards non-financial corporations, the strong and steady growth of the loans granted by MFIs to this sector, at around 10% a year, and the high increase in the issuance of debt securities contrast with a relatively moderate increase in the supply of quoted shares. This pattern may be partially explained by the low level of interest rates. In addition, the strong growth in the issuance of long-term securities by non-financial corporations may have been stimulated by the introduction of the euro and the creation of a much wider, deeper and more liquid securities market. Nevertheless, the issuance of fixed-income instruments by euro area non-financial corporations continued to represent a relatively small share of the overall financing of this sector. (See also the article entitled "Characteristics of corporate finance in the euro area" in the February 2001 issue of the ECB Monthly Bulletin.)

4 Financial investment of the non-financial sectors

Table 3 summarises the development of the financial investment of the non-financial sectors in the euro area. This information is currently less comprehensive than that on financing because it is not possible to identify completely the investment behaviour of the individual sectors. At the same time, the information available makes it possible to identify some major trends in the financial investment of the non-financial sectors over the reporting period.

In the period under review the annual growth rate of the financial investment of non-financial sectors fluctuated between 6% and 7%. Growth in holdings of individual instruments, however, varied somewhat.

It is of interest to compare the development of overall financial investment with that of M3.[5] As M3 corresponds to around only one-

5 *It is not possible at present to identify M3 precisely within the framework of the new statistics on the financial investment of the non-financial sectors, since information on holdings by sector and maturity is not complete.*

third of overall financial investment, the potential scope for substitution between the financial investment included in M3 and other financial investment is, in principle, large. However, annual rates of growth for M3 were as stable as those for overall financial investment, fluctuating within a range of between 5% and 6½% from the fourth quarter of 1998 to the second quarter of 2000. In fact, it seems that the bulk of the substitution within financial investment occurred between quoted shares, mutual fund shares and securities other than shares.

The fact that until the end of 1999 M3 growth was lower than the growth in financial investment suggests that the non-financial sectors invested relatively strongly in long-term financial assets (including long-term securities, quoted shares, insurance products and non-monetary mutual fund shares). Overall, the annual growth rate of investment in these long-term financial assets was between 9% and 10% from the end of 1998 to the third quarter of 1999, before declining to 7% by the second quarter of 2000. By contrast, financial investment in currency and MFI deposits, short-term securities and money market fund shares increased at a relatively moderate annual rate of 3-5% over the same period.

The relative attraction of long-term financial assets was linked to the rising valuation on the stock exchanges for most of the period, stimulating financial investment in quoted shares and in mutual fund shares. By contrast, investment in securities other than shares was adversely affected by the rise in long-term interest rates (and the associated fall in bond prices) until the end of 1999. At the start of 2000, the reversal of the situation in the financial markets (characterised by a stabilisation of long-term rates and greater volatility in the stock markets) was accompanied by a moderation in the financial investment in quoted shares and long-term mutual fund shares and a parallel recovery in the demand for securities other than shares.

Table 3

Financial investment of non-financial sectors in the euro area [1]

		Main financial investment components								Memo: M3
			Currency and deposits	Short-term securities other than shares	Long-term securities other than shares	Quoted shares	Mutual fund shares		Insurance technical reserves	
								Money market fund shares		
Ratio to GDP [2]										
1998	Q4	12.1	3.6	-0.8	-1.1	1.5	5.0	-0.1	3.9	3.5
1999	Q4	13.6	3.6	-0.2	1.0	1.8	3.3	0.3	4.2	4.5
2000	Q1	12.4	3.3	0.0	0.9	1.0	2.7	0.2	4.5	4.8
	Q2	12.2	3.1	0.2	1.3	1.0	2.1	0.1	4.5	4.0
Annual growth rates										
1998	Q4	6.2	4.5	-23.3	-4.7	5.5	25.4	-2.1	9.6	4.8
1999	Q1	6.9	5.2	-24.4	-0.9	5.9	22.3	4.0	9.5	5.4
	Q2	7.0	4.7	-19.4	3.2	6.2	18.4	6.0	9.4	5.5
	Q3	7.2	5.0	-21.7	3.2	8.5	15.7	9.4	9.5	5.8
	Q4	6.7	4.6	-9.6	4.5	5.6	13.2	9.3	9.9	6.0
2000	Q1	6.1	4.4	-0.3	4.0	2.9	10.3	7.0	10.3	6.0
	Q2	5.9	4.2	8.7	6.2	2.7	7.6	1.8	10.2	6.3

Source: ECB.

1) *Non-financial sectors comprise general government, non-financial corporations and households including non-profit institutions serving households.*

2) *Sum of quarterly transactions (T) as a percentage of sum of quarterly GDP; compiled as* $100*(T+T_{-1}+T_{-2}+T_{-3})/(GDP+GDP_{-1}+GDP_{-2}+GDP_{-3})$.

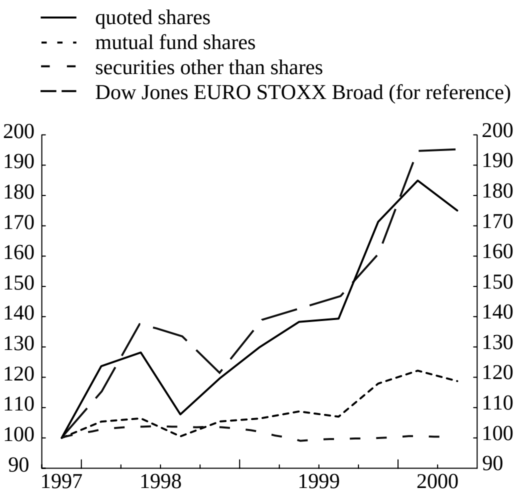
Over the period under review, there was continuously strong demand on the part of households for investment in insurance products. This development, together with the strong demand for mutual fund shares, can be partly explained by the increasing need to arrange for additional private pension provisions in the light of ageing populations across Europe. The introduction of the euro, reinforcing the stability of the macroeconomic environment and anchoring inflationary expectations in the medium term, is likely to bolster this kind of financial investment.

The non-financial sectors' balance sheet data displays substantial revaluation effects linked to the rise in stock exchange prices over the reporting period as a whole. The new data allow an evaluation of this asset price effect. Chart 3 shows the valuation effects for the holdings of quoted shares, mutual fund shares and other securities by the non-financial sectors. Overall, holding gains for quoted shares reached a maximum in the first quarter of 2000 (amounting to around 85% of the initial value of shares at the end of 1997), while the decline in stock prices starting in the second quarter of 2000 resulted in some holding losses towards the end of the period. The valuation effect was considerably lower for mutual fund shares (the value of which was 22% higher in the first quarter of 2000 than at the end of 1997) since only some of these funds are equity-based. For securities other than shares, valuation effects were relatively moderate over the same period (no more than 5% of the value at the end of 1997).

Chart 3

Asset prices of shares and securities held by non-financial sectors in the euro area [1)]

(revaluations including other changes, cumulated, end 1997=100)



Source: ECB.

1) *Shares excluding unquoted shares. Non-financial sectors comprise general government, non-financial corporations and households including non-profit institutions serving households.*

5 Conclusions

This article has provided a short overview of the TFI within the framework of quarterly financial accounts as well as an analysis of the main features of the financing and financial investment of the non-financial sectors from the end of 1997 until mid-2000. The development of the financing and financial investment of the non-financial sectors can now be integrated into the analysis of monetary and financial developments. This article gives some examples in order to illustrate the usefulness of supplementing the analysis of MFI statistics with information gained from these financial accounts data.

Financial accounts allow the monitoring of M3 and its components to be complemented by the regular analysis of the investment behaviour of the non-financial sectors. Money is indeed the most important form of short-term financial investment, and the demand for money reflects to some extent financial arbitrage across the whole spectrum of financial assets held by economic agents. In parallel, the analysis of MFI credit can be usefully complemented by monitoring the overall borrowing requirements and structure of financing of the various non-financial sectors, including the type of financing instruments and the relative importance of creditor sectors. This also allows account to be taken of movements in the debt held by non-MFI sectors.

One difficulty concerning the use of these data lies in the relatively long delay before the information becomes available (currently nine months). The time lag should be shorter in order for the data to be used in the analysis of recent monetary developments. Improvements in the timeliness of these data are planned. Furthermore, an enhancement of the dataset is envisaged (including a breakdown of M3 by individual counterpart sector), which will further increase the fields of application of the quarterly financial accounts data.

These data also provide a basis for an enhanced analysis of the link between financial and non-financial developments. A full integration of the real and financial variables requires more complete financial accounts covering the whole range of sectors and more comprehensive non-financial accounts by sector. Further work is planned in this area.