

Recent developments in financial structures of the euro area

Financial structures are of particular interest for central banks because they have an impact on the way central banks operate through the banking system and in financial markets. In October 2002 the ECB published a “Report on financial structures” describing the main characteristics of the financial structures in each euro area country and in the euro area as a whole. The aim of this article is to update and complement some of the information contained in this report. The article focuses on how financial flows are channelled through financial intermediaries or through non-intermediated instruments (i.e. financial markets).

A process of disintermediation got under way in parallel with the significant rise in stock prices in the late 1990s, the introduction of the euro, a surge in financial innovation and an increase in savings for pension purposes. The correction of stock prices and episodes of turbulence in the financial markets since mid-2000 have somewhat reversed this trend. Nevertheless, the increased importance of non-bank financial intermediaries, the emergence of a corporate bond market and the process of consolidation and innovation in stock markets have together deepened the financial markets and broadened the financial system, paving the way for an improved allocation of capital in the euro area.

I Introduction

Central banks operate through the banking system and financial markets. They thus need a sound knowledge of how the financial system works, e.g. of the supportive role played by banks in the financial system and of the factors underlying observed trends in financial structures. In October 2002 the ECB published a “Report on financial structures”, which described the financial structures of the euro area and its constituent countries and analysed the functioning of the financial system. The aim of this article is to update and complement some of the information contained in this report. The main focus is on the role played by intermediaries and non-intermediated instruments (i.e. financial markets) in the financial system of the euro area.

It is difficult to make a clear-cut distinction between intermediated and non-intermediated financial assets. For the purpose of highlighting the role of financial intermediation in this article, “intermediated” financial assets have been categorised as assets held with monetary financial institutions (mainly credit institutions and money market funds), insurance corporations and pension funds and other financial intermediaries (mainly investment/mutual funds). Conversely, “non-intermediated” financial assets consist of direct holdings of

shares and other equity and of securities other than shares (primarily bonds).¹

The euro area financial system is more or less evenly split between intermediated and non-intermediated instruments. At the end of 2001, the value of euro area residents’ holdings of intermediated financial assets was equivalent to 254% of GDP. Their holdings of non-intermediated financial assets amounted to around 285% of GDP and thus accounted for 53% of their total holdings of financial assets.² Excluding financial corporations, the financial asset holdings of the non-financial sectors of the euro area at the end of 2001 were equivalent to 162% of GDP (52% of the total) for intermediated assets and 147% of GDP (48% of the total) for non-intermediated assets.

A key development in the European financial system since the mid-1990s has been a trend towards disintermediation. In 1995, financial asset holdings of euro area residents were

¹ For a more detailed description of the division of financial assets into intermediated and non-intermediated assets, see “Report on financial structures”, ECB, October 2002.

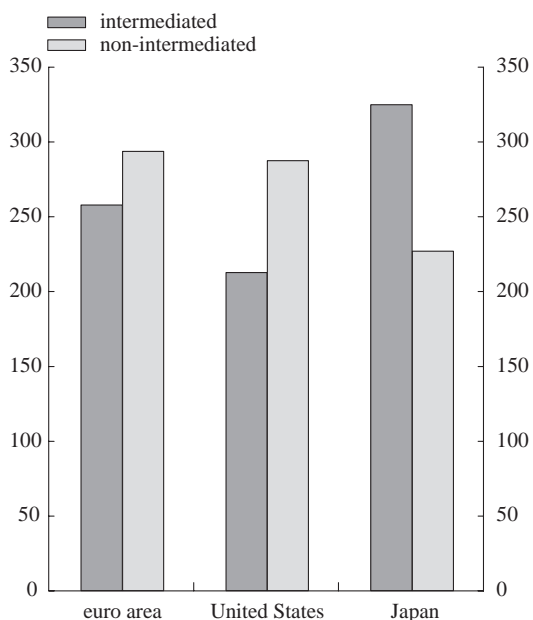
² In this article the economic sectors’ holdings and acquisitions of financial assets are based on financial accounts data, which are compiled by the ECB. At the time of writing, transaction data were available from 1995 to 2002, while data for amounts outstanding were available only for the period from 1995 to 2001.

primarily allocated to intermediated assets (around 53% of the total). Since then, the euro area financial system has become more oriented towards non-intermediated instruments. The process of disintermediation is confirmed by transaction data, which show that euro area residents' (net) acquisitions of non-intermediated assets followed a significant upward trend between 1995 and 2000 (see Chart 1). It seems that a major driving force behind this process was the significant rise in stock prices over this period, which encouraged investments in relatively risky assets. It is therefore not surprising to see a slight reversal of this trend in 2001 and 2002, as investors moved into safer assets, such as bank deposits and money market funds, following the correction in stock prices and the financial market turbulence over that period.

In terms of its allocation between intermediated and non-intermediated instruments, the euro area financial system

Chart 2
Distribution of financial assets in the euro area, the United States and Japan

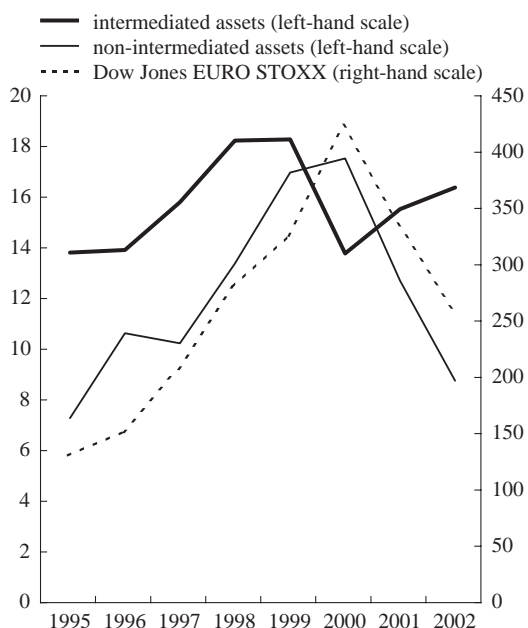
(as a percentage of GDP; end-2001)



Sources: ECB, Federal Reserve Board and Bank of Japan.

Chart 1
The acquisition of financial assets by euro area residents and the Dow Jones EURO STOXX index

(as a percentage of GDP; index level in points)



Sources: ECB and Reuters.

Note: Non-intermediated assets do not include financial derivatives.

lies somewhere between the US financial system, which is more market-oriented, and the Japanese financial system, where financial intermediaries – and banks in particular – play a dominant role (see Chart 2). This aggregate comparison, however, hides important additional differences. For instance, in the euro area, a relatively large proportion of shares are not quoted, reflecting the fact that most euro area non-financial corporations are small and medium-sized enterprises. In addition, both in the euro area and in Japan, most intermediated assets are held with monetary financial institutions (MFIs), while in the United States the most important intermediaries in terms of the value of assets outstanding are pension funds.

The remainder of this article is structured as follows. Section 2 describes the allocation of intermediated assets among different types of financial intermediary and subsequently describes in detail developments in the three main intermediary segments: MFIs, insurance corporations and pension funds (ICPFs), and other financial intermediaries (OFIs).

Section 3 describes the allocation of assets among the different types of non-intermediated instrument and the

structural developments in the bond and stock markets. Section 4 offers some concluding remarks.

2 Financial intermediaries

Financial intermediaries are prominent actors in the euro area financial system both in terms of the significant funds that the non-financial sectors place with them (162% of GDP at end-2001) and in terms of their considerable involvement in the financial markets. Holdings of the non-financial sectors with MFIs remain the most important intermediated financial assets in the euro area. In terms of amounts outstanding at the end of 2001, financial assets held by non-financial sectors with MFIs were valued at 82% of GDP. The corresponding holdings with insurance corporations and pension funds amounted to 51% of GDP, while holdings with other financial intermediaries had a value of 28% of GDP (see Table I).

However, on average between 1998 and 2002, the non-financial sectors of the euro area allocated more funds to non-bank financial intermediaries (i.e. insurance corporations, pension funds and other financial intermediaries) than to MFIs. The non-financial sectors annually acquired financial assets of other financial intermediaries (mainly investment fund shares) for a value averaging around 2.8% of GDP between 1998 and 2002. The acquisition of insurance technical reserves averaged 3.7% of GDP over the same period. The sum of this (6.5% of GDP) was more than twice the allocation of funds to MFIs, which reached 3.0% of GDP. Flows into insurance corporations and pension funds were

Table I
Financial assets (acquisitions and holdings) in the form of intermediated instruments by sector
(as a percentage of GDP)

	Monetary financial institutions (MFIs)					Other financial intermediaries (OFIs)					Insurance corporations and pension funds (ICPFs)				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Annual transactions															
Households	1.6	1.9	1.0	2.3	3.3	4.6	2.6	1.5	1.1	0.8	3.6	4.1	3.8	3.5	3.3
Non-financial corporations	1.0	0.4	1.0	1.3	0.3	0.5	0.4	0.1	0.8	1.2	0.0	0.1	0.0	0.1	0.1
General government	0.2	0.5	0.7	-0.7	0.2	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Financial corporations	4.5	5.8	2.2	5.1	5.5	2.2	2.2	2.7	1.9	1.5	0.0	0.1	0.0	0.1	0.0
Total	7.2	8.5	5.0	7.9	9.2	7.3	5.3	4.6	3.9	3.5	3.7	4.3	3.9	3.7	3.4
Year-end outstanding amounts															
Households	63.5	63.3	61.4	61.6	.	21.5	25.0	24.3	22.7	.	43.8	47.4	49.0	49.9	.
Non-financial corporations	13.7	13.6	14.1	14.9	.	4.1	4.6	4.4	4.3	.	1.3	1.4	1.4	1.4	.
General government	6.2	6.4	6.8	5.9	.	0.4	0.7	0.8	0.9	.	0.1	0.0	0.0	0.0	.
Financial corporations	69.3	74.3	72.9	75.6	.	10.1	13.5	15.6	15.7	.	1.2	1.3	1.3	1.3	.
Total	152.7	157.6	155.1	158.0	.	36.1	43.7	45.1	43.6	.	46.3	50.1	51.7	52.7	.

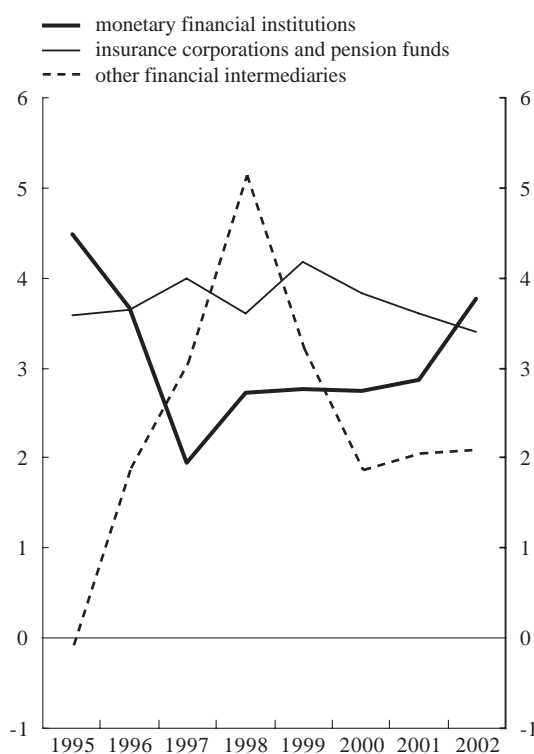
Source: ECB.

persistently strong between 1995 and 2002, largely reflecting an increase in private savings related to population ageing, while investment in other financial intermediaries was significant between 1997 and 1999, but decreased in more recent years (see Chart 3). The decline in flows into other financial intermediaries from 1998 onwards can be considered a normalisation following the strong growth of this industry in previous years. In addition, many investors may to an increasing extent have replaced holdings in investment funds with direct holdings of shares in the period 1998-2000 as a result of rising stock prices and the privatisation activity of some euro area governments.

Several factors may explain why the importance of MFIs has been diminishing relative to other types of intermediary/instrument in recent years. In some countries, changes in tax regulations have altered saving

patterns. More generally, the low levels of interest rates and inflation have led many investors to search for investments with higher yields than traditional bank deposits. In response to this demand, alternative instruments have been offered both by MFIs and other intermediaries, resulting in increased competition among different providers of similar services. Furthermore, demographic developments have sparked a trend to invest in financial assets of a longer-term nature, such as pension fund shares. However, owing to the decline in stock prices and the global rise in risk aversion (especially after the terrorist attacks on 11 September 2001), many investors have returned to safer assets such as bank deposits and money market funds. Thus, the amount of financial assets allocated to MFIs in 2001 and 2002 was higher than in previous years, although still somewhat lower than the amount of assets allocated to non-bank financial intermediaries.

Chart 3
Acquisition of intermediated assets by euro area non-financial sectors
(as a percentage of GDP)



Source: ECB.

Monetary financial institutions

Recent years have seen a continuation of the steady decline in the number of MFIs that occurred over the last couple of decades. At the end of 1998, there were 9,844 MFIs (excluding central banks) in the euro area. By end-2002, this number had declined to 8,531. While the overall number of MFIs, which include credit institutions and money market funds, decreased in the period 1998-2002, the number of money market funds increased significantly (by 7%) over the same period to a total of 1,620. The money market funds are, however, concentrated in a few countries, such as France and Luxembourg, and overall they account for only a small part of the total MFI sector (when measured in terms of total MFI assets).

These developments reflect a continuing consolidation of the banking sector, which in the period up to 2000 took place in the form of mergers between (mainly) smaller credit institutions at both regional and national level. Cross-border mergers in the

euro area have been relatively rare and have mostly involved larger institutions that have expanded on a regional basis, e.g. in the Benelux countries or the Nordic/Baltic region. At present, only a few MFIs operate on a euro area-wide scale and then primarily in the wholesale area. Retail activities are still taking place on a predominantly regional/national level, although new technologies, such as internet banking, may eventually enable further cross-border expansion in the retail business. Consolidation has slowed somewhat recently, mainly as a result of the weakening stock market, which has made mergers and acquisitions more difficult to finance, as it has become more costly to issue equity capital. The slowdown has been most evident for (cross-border) mergers involving major banks; continuing merger activity has largely been at a domestic level between small and medium-sized banks.³

Traditional banking activities, such as granting loans and taking deposits, still account for most of the aggregated MFI balance sheet. At the end of 2002, loans amounted to 70% of total MFI assets (49% excluding euro area interbank loans) and deposits amounted to more than 65% of total MFI liabilities (45% excluding euro area interbank funding). However, between 1998 and 2002, the share of loans to resident non-MFIs in total assets declined by almost 4%. Similarly, over the same period, the share of deposits taken from resident non-MFIs in total MFI liabilities fell by more than 8%. These developments seem to some extent to reflect a shift in the nature of banking activities towards a larger degree of securitisation (see Box 1). On the asset side, MFIs had increased their holdings of securities (including bonds, shares and money market paper) to 23% of total assets by the end of 2002, representing an increase of almost 9% since 1998. On the liability side, MFIs are to an increasing extent funding their activities through the issuance of securities as a complement to traditional deposit financing.

Furthermore, the aggregated balance sheet of MFIs only reflects the on-balance-sheet

activities of banks and other credit institutions. It does not provide information about off-balance-sheet activities, such as derivatives trading, financial guarantees and loan commitments (e.g. liquidity back-up lines and securities underwriting back-up lines), which have been growing in importance in recent decades. More generally, the technological developments and financial deregulation and innovation in the past decades have at the same time broadened the scope of banking activities and led to more sophisticated risk transformation and management. This is also evidenced by the fact that banks' interest income has gradually been declining relative to their non-interest income.⁴ Banking has thus changed in many respects, but MFIs remain important players in the euro area financial system.

Insurance corporations and pension funds

Owing to their function as saving vehicles for old age, insurance corporations and pension funds primarily invest in financial assets of a long-term nature, such as equity and long-term bonds. At the end of 2002 holdings of debt securities constituted 38% and quoted shares 35% of total financial assets of insurance corporations and pension funds. While the overall share of securities in the total assets of insurance corporations and pension funds has remained largely unchanged at around 70-75% over the past five years, notable changes have occurred with respect to the importance of quoted shares relative to debt securities. During the stock market boom of the late 1990s and early 2000, the value of share holdings increased significantly, and the ratio of quoted shares to total assets peaked at 41% by the end of 2000, whereas debt securities constituted only 33% of total assets. The subsequent stock market correction in 2001 and 2002 reversed this trend, causing the combined value of quoted

³ See, for example, "Structural analysis of the EU banking sector", ECB, November 2002.

⁴ See, for example, "EU banks' income structure", ECB, April 2000.

shares and mutual fund shares on the aggregated insurance corporations and pension funds balance sheet to decrease significantly, while the share of debt securities had by end-2002 returned to its end-1998 level. Most of these changes were due to revaluation adjustments and only to a lesser extent reflected transactions.

On the liability side, “insurance technical reserves”, which insurance corporations are legally obliged to build up over the life of an insurance contract to take into account future claims, take up the major part of the funding of insurance corporations and pension funds. Furthermore, the sharp decline in stock prices and other problems facing insurance corporations in the past two years have resulted in a marked decline in the value of the quoted shares issued by these corporations. While quoted shares accounted for 11% of total liabilities at the end of 1998, the figure had fallen to 3% by the end of 2002.

Public pension schemes have traditionally played a dominant role in household saving for old age in most euro area countries, but demographic trends have in recent years strengthened the incentives to use complementary (private) pension schemes. Households have therefore increasingly allocated long-term savings to insurance corporations and pension funds. However, the importance of this sector varies significantly across the euro area, among other things reflecting country-specific factors in relation to mandatory funded pension schemes, the social security system and the tax treatment of voluntary pensions.⁵

Other financial intermediaries

Over the last decade other financial intermediaries (primarily investment/mutual funds) have become more important in the euro area financial system both as collectors of funds and as investors in the financial markets. The composition of their assets has changed over the past two years, mainly reflecting the decline in stock prices and the rise in bond prices. The percentage of assets that other financial intermediaries held in shares and other equity fell from 43% at end-2000 to 30% by end-2002. Investment in securities other than shares increased from around 39% of total assets in 2000 to 47% in 2002. The share of total assets invested in real estate funds and other funds also rose. This reflected the continued increase in real estate prices in some European countries and in the United States, as well as an increased incentive to diversify portfolios towards alternative investments amid high capital market volatility.

The importance of other financial intermediaries still varies considerably across the euro area countries, with Germany, France and Luxembourg accounting for around 72% of the total activity of these institutions in the euro area at the end of 2002.⁶ The size of the other financial intermediary segment in terms of GDP is also above the euro area average in Belgium, Italy and Austria.

⁵ See “Report on financial structures”, ECB, October 2002, p. 26.

⁶ Official ECB statistics on other financial intermediaries do not include data for Ireland. Alternative sources suggest that investment funds in Ireland are important (see the above-mentioned “Report on financial structures”).

3 Markets

Euro area residents' holdings of non-intermediated financial assets (shares and other securities) totalled 285% of GDP at the end of 2001 (see Table 2). Shares and other equity accounted for around 60% of non-intermediated financial assets, while other securities (mainly debt securities) made up the remaining 40%. Around 39% of shares and other equity was held by non-financial corporations at the end of 2001, partly reflecting the importance of cross-shareholdings and non-quoted shares in the euro area. At the same point in time, financial corporations held 74% of the total outstanding amount of securities other than shares.

Shares dominated the acquisitions of financial assets by the non-financial sector in the euro area between 1998 and 2000. On average in that period, it annually acquired shares for a value of around 4.6% of GDP, reflecting primarily acquisitions by non-financial corporations. Over the same period, the acquisition of securities other than shares by the non-financial sector amounted to 1.5% of GDP per year.

Financial corporations were the main investors in non-intermediated assets between 1998 and 2000, accounting for 63% of the total securities acquired in 2000.

In 2001 and 2002, owing to the decline in equity prices, investment in shares was lower than in the previous years, which was a reversal of the increasing trend observed since 1995. By contrast, investment in securities other than shares increased sharply in 2001. In 2002 it was comparable with investment in shares. In particular, from the second half of 2001 financial corporations seem to have reallocated their financial portfolios away from equity towards more secure financial assets. The decrease in the equity investments of non-financial corporations also reflected the subdued mergers and acquisitions activity during that period.

The debt securities markets

There has been substantial growth in the amount outstanding of debt securities in the

Table 2

Financial assets (acquisitions and holdings) in the form of non-intermediated instruments by sector

(as a percentage of GDP)

	Shares and other equity					Securities other than shares				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Annual transactions										
Households	0.4	0.6	0.3	0.9	-0.9	-2.0	0.6	0.7	1.2	1.0
Non-financial corporations	2.7	4.5	6.8	3.5	2.6	-0.3	4.5	1.5	1.5	0.3
General government	-0.6	-0.7	-0.2	0.0	-0.3	0.1	-0.7	0.1	0.1	0.1
Financial corporations	4.5	5.3	6.3	4.9	2.2	14.3	5.3	9.5	12.3	2.6
Total	7.0	9.7	13.2	9.3	3.7	12.1	9.7	11.9	15.1	4.0
Year-end outstanding amounts										
Households	44.4	56.1	51.8	41.8	.	20.0	18.4	18.8	19.1	.
Non-financial corporations	52.7	69.2	73.9	67.2	.	4.5	6.0	7.2	8.5	.
General government	9.6	10.8	9.5	8.5	.	1.9	2.0	2.0	2.1	.
Financial corporations	44.2	61.4	62.6	54.6	.	79.7	80.2	79.5	82.9	.
Total	150.8	197.4	197.8	172.2	.	106.1	106.5	107.6	112.6	.

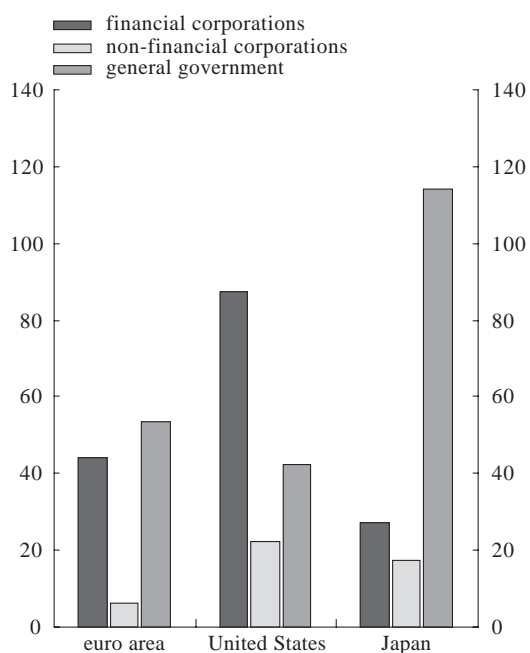
Source: ECB.

euro area. The total amount outstanding of euro-denominated debt securities issued by euro area residents increased by an annual average of 6% between 1998 and 2000. However, growth rates differed significantly across issuing sectors. On account of consolidation of budgets, between 1998 and 2000 the amount outstanding of debt securities issued by central government grew by only 4% a year. Over the same period, corporate issuers stepped up the pace of their issuance activities and the amount outstanding of corporate debt securities issued by non-MFIs increased at an annual rate of around 17%. In 2001 and 2002, bond issuance trends partly reversed compared with the previous few years. There was a general decline in private sector issuance and a rise in issuance by the general government sector, reflecting differences in the financing needs of these sectors at a time of weak economic growth.

The relative value of outstanding debt securities is lower in the euro area than in the other major developed economies. The total amount outstanding of debt securities at the end of 2002 equalled around 105% of GDP in the euro area, 154% in the United States and 160% in Japan. However, these aggregate values mask significant differences in the sectoral composition. Both in the euro area and in Japan, government debt accounts for most of the outstanding securities. At the end of 2002, in the Japanese debt market government securities accounted for around 72% of the total amount outstanding, while in the euro area government securities represented 51% of the total debt outstanding. In the United States, by contrast, the most important issuers of debt securities are financial corporations, and the total private sector (financial plus non-financial corporations) accounted for around 72% of the total debt outstanding at the end of 2002 (see Chart 4). In addition, in the euro area most corporate borrowing is via loans, while in the United States loans only cover about half of corporations' funding needs.⁷ There thus seems to be scope for further development of the corporate bond market in the euro area.

Chart 4
Amounts outstanding of debt securities denominated in domestic currency issued by residents in the euro area, the United States and Japan

(as a percentage of GDP; end-2002)



Sources: ECB and BIS.

Trends in the corporate bond market

In 2001 net bond issuance by non-MFIs (non-monetary financial corporations and non-financial corporations) was higher than net issuance by banks (see Chart 5). This represented a notable change in issuance activity compared with the recent past; until the end of 2000 euro area MFIs were the main net issuers of corporate bonds among euro area residents.

The start of Stage Three of Economic and Monetary Union seems to have led to a large increase in the use of bond issuance as a

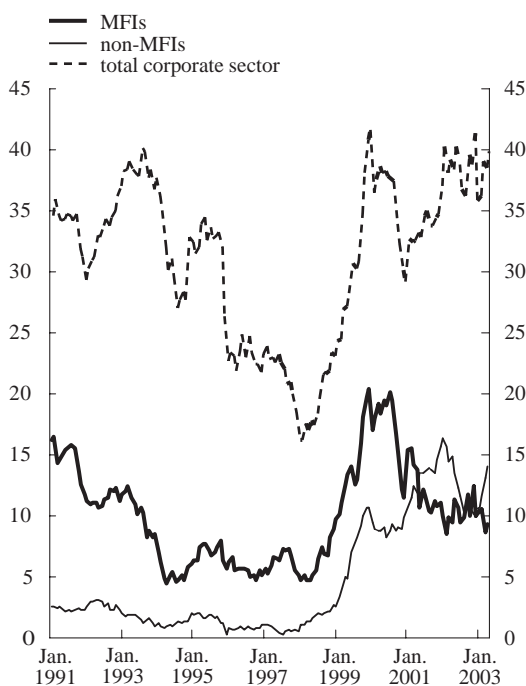
⁷ See B. N. Carnegie-Brown and M. King, "Development of the European bond markets" published in "The transformation of the European financial system", Second ECB Central Banking Conference, October 2002.

financing source by corporations (both financial and non-financial). However, the increase was also due to other, temporary factors, such as corporate restructuring and related mergers and acquisitions activity as well as the liberalisation of the telecommunications industry. The impact of the latter factors seemed to diminish somewhat in 2001. Debt securities issuance from the private sector continued to grow in 2002, albeit at a slower pace, also reflecting lower financing needs due to sluggish economic activity.

In recent years, non-monetary financial corporations have been a driving force behind the issuance activity of the non-MFI sector. Between 1998 and 2002, the annual average rate of growth in the amount outstanding stood at around 34% for non-monetary financial corporations and 12% for non-financial corporations. The strong growth in the issuance activity of non-monetary financial corporations seems to reflect, in part, a shift from direct issuance by the non-financial corporate sector to indirect issuance via *special finance vehicles* (see Box).

Chart 5
Net issuance of corporate bonds in the euro area by issuer

(EUR billions, 12-month moving average)



Source: ECB.

Box

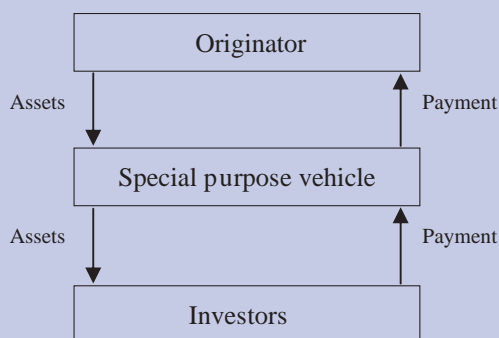
Securitisation and the activity of special finance vehicles

One of the most striking developments in debt securities issuance over recent years has been the remarkable increase in the amount of debt securities issued by non-monetary financial corporations in the euro area. This group includes insurance corporations and pension funds and other financial intermediaries, but the bulk of its securities issuance stems from special finance vehicles. These are institutions which engage in financial activities and whose main purpose is to raise money on behalf of a third party, e.g. a non-financial corporation, a credit institution or an investment fund. Such vehicles can be legally owned by the company to which they are providing funds, or they can be without capital links to that company and can be established to facilitate a particular financial transaction. In the latter case they are known as special purpose vehicles (SPVs). SPVs act solely as a single-purpose conduit for channelling funds from lenders to borrowers. They are precluded from engaging in activities other than the transaction for which they were established and they immunise the investor against the potential bankruptcy of the original owner of the assets (the originator).

In the euro area, these finance vehicles existed until very recently in only a few countries – particularly in the Netherlands, where they started their activities at the end of the 1970s.¹ Initially, they were typically established in that country by foreign multinationals and they were limited to collecting funds and lending or investing them within their own group. They were pure holding companies or companies managing licences,

¹ See De Nederlandsche Bank, *Statistical Bulletin*, March 2000.

Chart A: Creation of an asset-backed security



portfolios of banks, can be packaged into securities and sold to investors. In this context, securitisation entails the sale of financial assets by the originator to a separate legal entity, the SPV. To finance its purchase, the SPV (in some cases through a trust whose beneficiaries are investors in the securities) issues marketable securities usually known as asset-backed securities (see Chart A). The conveyance of assets from the originator to the SPV generally needs to be conducted in a manner that results in a “true sale”. This is necessary to remove the assets from the bankruptcy or insolvency estate of the originator – the “bankruptcy remote principle”.

As a way of raising funds, securitisation brings several advantages to the originator. First, an SPV can generally obtain cheaper finance since it is typically assigned a higher credit rating than the originator. Since the assets are separated from the credit risk of the originator, the premium demanded by investors to lend money to that particular corporation is generally lower than it would be in traditional bank and debt capital markets. Depending upon the nature of the transaction and the assets involved, it may be necessary to enhance the credit quality of the asset pool by complementing it with one or more types of credit and/or liquidity support. These may be supplied from internal sources or, for a fee, by a third party. Second, institutions with a low rating, or no rating at all, can gain access to institutional investors, including banks, insurance companies and pension funds, which are often restricted to investment in high-rated bonds. Third, as an off-balance-sheet funding technique, securitisation is also aimed at reducing a company’s leverage by selling assets and using the proceeds, for example to repay more expensive long-term debt.

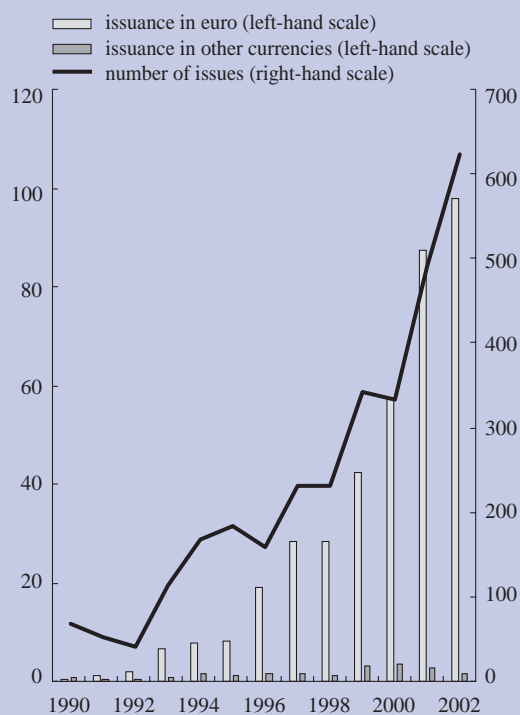
The issuance activity of special finance vehicles flourished in the last few years of the 1990s in parallel with the introduction of the euro. The bulk of the issuance of financial institutions legally established in the euro area countries is denominated in euro.

patents or film rights. When the exchange controls on financing companies engaged exclusively in collecting funds and investing them abroad were relaxed, these special financial institutions were also able to raise money from non-resident investors external to their group.

More recently, the activity of special finance vehicles has been linked to the development of the securitisation market. Securitisation is in part carried out through SPVs. The term “securitisation” refers to the transformation of non-marketable assets into marketable securities. Assets such as mortgage loans, which have traditionally been held in the loan

Chart B: Issuance activity of special finance vehicles¹⁾: volume and number

(EUR billions)



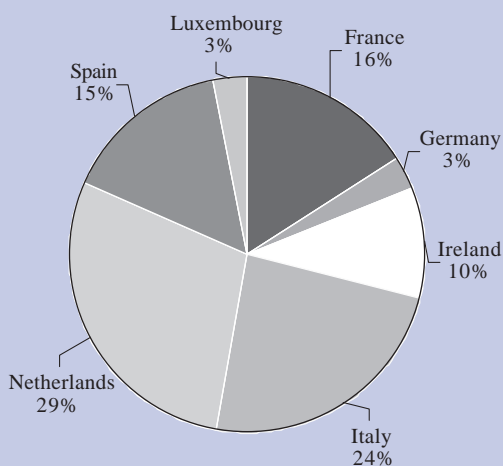
Source: Bondware Dealogic.

1) Special finance vehicles consist of “SPVs”, “finance vehicles” and “private finance companies” as defined by Bondware Dealogic.

Regulatory changes in several euro area countries also fuelled the increase in special finance vehicle activity, both in terms of the number of issues and issuance volume (see Chart B).

Special finance vehicles are usually set up in jurisdictions which are more favourable in terms of the bankruptcy remote principle, the security arrangements provided for the investors and the tax treatment. In the euro area, a traditional jurisdiction in which to establish special finance vehicles has been the Netherlands, which on average between 1990 and 2002 accounted for around 30% of the total volume issued by such vehicles. Other common jurisdictions used for establishing special finance vehicles (in particular SPVs) are Ireland, Italy and Luxembourg. In addition, securitisation entities are established in the same jurisdiction as the originator in Spain, France and Italy (see Chart C).

Chart C: Issuance activity of special finance vehicles¹⁾ by country of issuer
(percentage of total issuance; end-2002)



Source: Bondware Dealogic.

1) Special finance vehicles consist of "SPVs", "finance vehicles" and "private finance companies" as defined by Bondware Dealogic.

Trends in government debt securities markets

Government debt securities represent the largest segment of the debt securities market. They amounted to 54% of GDP at the end of 2002, having grown slowly between 1998 and 2000. During the 1990s, the share of short-term government securities in total government debt declined steadily. Substantially lower long-term interest rates compared with the years prior to Stage Three of Monetary Union and an environment of price stability created incentives for euro area governments to lengthen the average maturity of their debt, taking advantage of the flatter yield curve. The adjustment process may have come to an end in the late 1990s, as short-term government securities issuance rose again in 2001 and 2002. This partly reflected the deterioration of economic activity and the consequent increase in government borrowing needs, as well as the short-term budgetary benefits from the low level of short-term yields.

Government debt financing has undergone major changes in the last few years. The

introduction of the single currency resulted in increased competition among government debt managers, fostering transparency and liquidity in both the primary and secondary markets. At the same time, regulatory changes relaxed constraints on foreign holdings for certain categories of institutional investors, which were allowed to diversify their financial portfolios abroad. The disappearance of exchange rate risk in the euro area significantly reduced investors' "home bias". For example, domestic ownership of government debt in the euro area decreased from 73% of the total in 1998 to 63% in 2002. Compared with the years prior to Stage Three, the volume of individual primary issues has generally increased, as governments are interested in providing high liquidity to the markets and accessing trading platforms. The use of electronic trading systems for the secondary market has increased efficiency and liquidity, overall lowering financing costs for issuers.

There have been a number of important innovations in debt management. Increasingly, euro area debt managers use interest rate swaps, which give them more flexibility to

actively manage their liabilities, without influencing volumes of issuance in the market. The involvement of governments in swap markets has had an impact on these markets owing to the large size of the operations involved and has tended to put a ceiling on euro swap spreads.⁸ Another important innovation has been the issuance of index-linked bonds. The French Treasury took this initiative in October 2001 when it started issuing bonds linked to the euro area HICP excluding tobacco. The Greek government followed suit in March 2003, and the Italian government in September 2003. These financial instruments are of particular interest for insurance corporations and pension funds, as these financial intermediaries tend to have long-term liabilities linked to nominal price developments. Indeed, according to the French Treasury, insurance corporations and pension funds acquired around 18% of the French index-linked bonds offered on the occasion of the first issue.

More local and regional governments have issued bonds to meet their financing needs, seizing the opportunity to access a larger investor base. Regulatory changes in some countries contributed to this development, as did the less favourable budgetary developments and the resulting increased borrowing requirements of these public entities. Despite the strong growth in issuance of debt securities by local and regional governments in recent years, its importance is low – the overall amount outstanding accounted for only around 4% of

total government debt securities issuance in the euro area at end-2002 – and it remains limited to a small number of countries.

The stock market

The development in the amount outstanding of quoted shares in the euro area has broadly followed the upswings and subsequent downturns in share prices. The amount outstanding of quoted shares held by non-financial sectors was equivalent to 64% of GDP at end-2001 and had declined to 49% of GDP by end-2002. The non-financial sectors' holdings of quoted shares increased steadily between 1995 and 2000 amid favourable developments in stock prices. In 2001, however, this trend was reversed, and the downtrend continued throughout 2002 as stock prices declined for their third consecutive year. This prolonged decline in stock prices resulted in a significant drop in quoted share holdings, while the holdings of mutual fund shares were almost unchanged.

The market capitalisation of euro area stock exchanges was equivalent to 47% of GDP at the end of 2002 (see Table 3), which compares with a peak of 88% of GDP in 1999. The decline mainly reflects the decrease in stock prices, but also de-listing, as the total number of companies quoted fell by 2% between end-2001 and end-2002.

⁸ See E. Remolona and P. D. Wooldridge, *BIS Quarterly Review*, March 2003.

Table 3
Characteristics and activity of the euro area stock market

	1998	1999	2000	2001	2002
Number of public companies listed	3,870	-	5,103	5,910	5,787
Number of newly listed companies	635	937	929	820	590
Market capitalisation of listed domestic shares (EUR billions)	3,625	5,430	5,646	4,942	3,324
Market capitalisation of listed domestic shares (% of GDP)	61	88	87	72	47
Gross amount of capital raised by domestic companies through listed shares (EUR billions)	120	186	277	144	73
Concentration (top ten companies' percentage share of total market capitalisation)	62	68	67	62	59

Sources: ECB (*Report on financial structures*), World Federation of Exchanges and Comisión Nacional del Mercado de Valores.

Stock price developments in 2001 and 2002 made equity financing an expensive option for euro area corporations. Both capital increases and initial public offerings (IPOs) declined. The new capital raised by domestic companies through the issuance of equities on regulated stock exchanges in 2001 was roughly half the volume raised in 2000, and it declined even further in 2002. This was also reflected in a significant drop in the number of euro area IPOs as well as in their volume in 2001 and 2002 compared with the previous years.⁹ Similar developments also took place in the primary equity markets in the United States and Japan (see Chart 6).

The diminished opportunities to raise capital in the equity market significantly affected the financing possibilities of companies belonging to the so-called “New Economy”, which typically lack collateral to put forward as a loan guarantee. The activity of the “parallel markets” (mainly the new markets created between 1996 and 2000 to specialise in the trading of shares in technology or low

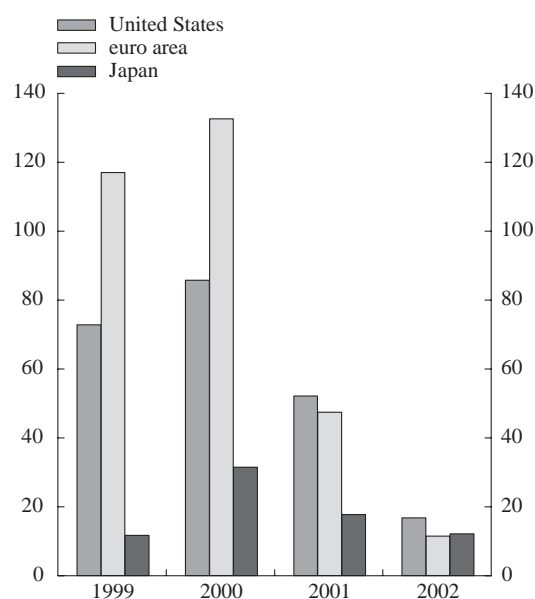
capitalisation firms), which were flourishing at the end of 2000, dropped significantly. The market capitalisation of these parallel markets, which amounted to around 3% of GDP at the end of 2000, fell by 78% between end-2000 and end-2002. Over that period the new capital raised on these exchanges was virtually nil. The German Neuer Markt was, in fact, closed down at the beginning of 2003.

Since the early 1990s, several trends have had an impact on stock exchange activity. Alternative trading systems operating on networks (such as the internet) in parallel with traditional market places have emerged, offering advantages such as the possibility of cross-border trading and lower transaction costs. While specialisation and segmentation of stock exchanges seemed to prevail after the introduction of the single currency, more recent developments seem to point towards consolidation, probably owing to increased competition.

The globalisation of financial markets and market operations has also prompted important developments in the clearing and settlement business. Some consolidation in the clearing and settlement infrastructure of the euro area has taken place. However, there are still many different systems in use in Europe. The present structure seems to leave scope for further consolidation and harmonisation, potentially generating substantial savings for end-users (see also the article entitled “The integration of Europe’s financial markets” in this issue of the Monthly Bulletin).

Chart 6
Volume of initial public offerings in the euro area, the United States and Japan

(EUR billions)



Source: Bondware Dealogic.

⁹ See also the box entitled “Recent trends in equity issuance in the euro area” on page 21 of the March 2003 issue of the ECB’s Monthly Bulletin.

4 Concluding remarks

The euro area financial system is a well-developed system in which intermediated and non-intermediated instruments are more or less equally important. It therefore lies somewhere between the more market-oriented US financial system and the more bank-oriented Japanese financial system. In the late 1990s, the system started to rely less on traditional bank intermediation through loans and deposits, with other types of financial intermediary developing, as investors allocated more funds to long-term savings products and direct securities holdings. Stock price increases at the end of the 1990s had a significant impact on the euro area financial system by reinforcing some of the general trends, e.g. towards increased household and corporate shareholdings. At the same time, the corporate bond market flourished,

supported by several temporary factors. The bond market still continues to develop, as corporations are seizing the opportunity to issue bonds on a euro area-wide scale. In addition, the introduction of the single currency prompted consolidation of the euro area's financial markets. While the correction of stock prices and the general turbulence in financial markets have caused a moderation of the longer-term trend, there is a clear movement towards a more complete financial system in the euro area. The growth of non-bank financial intermediaries, the emergence of a significant corporate bond market and the process of consolidation and innovation in stock markets have together deepened the financial markets and broadened the financial system, paving the way for a better allocation of capital in the euro area.