Spanish financial markets and intermediaries

In recent years, the Banco de España Economic Bulletin has been paying increasing attention to Spanish financial markets and intermediaries. Clearly, they have always played a central role in the transmission mechanism of monetary policy decisions, both when these decisions were taken by the Banco de España and now that the Eurosystem determines the monetary policy for the euro area centrally. Also, the monitoring of financial markets and intermediaries is essential to promote the stability of the financial system (a function assigned to the Banco de España by statute) and to identify the degree of competitiveness of an industry whose relative weight in the Spanish economy is growing.

The aim of this article is to give an overview of the main recent developments in the markets for financial products and services and of the behaviour of the main intermediaries acting in such markets. Given the notable changes in the Spanish financial system as a consequence of the start of Stage Three of EMU, and the data currently available, the analysis focuses on the first three quarters of 1999.

The article is divided into two parts. Part 1 analyses the developments in financial markets, distinguishing between fixed-income, equity and derivative markets. For each market, the analysis focuses on the prices and the main developments in the primary and secondary markets. Part 2 analyses the behaviour of the main financial intermediaries, distinguishing between deposit money institutions and other important intermediaries, such as mutual funds, pension funds and insurance companies.

1. THE SPANISH FINANCIAL MARKETS

In 1999, important changes affected the Spanish money and securities markets. First, the existence of a single monetary policy in the euro area and the fixing of the irrevocable exchange rates between the euro area currencies meant that the interbank deposit markets of the countries making up this area were now fully integrated (1) and that the spread of yields on government debt in the area held at low and stable levels. Second, since the beginning of 1999, the cash and securities accounts for the trading, quoting and settlement of transactions in the Spanish markets have been redenominated in euro. These changes have coincided with the entry into force of the reform of the Se-

⁽¹⁾ In fact, it is no longer possible to speak of a Spanish money market. The relevant geographical area for this purpose encompasses the countries that make up the euro area.

curities Market Law (Law 37/1998), which adapts Spanish law to various Community directives and completes the process of opening up Spanish markets to external competition, by enshrining the principle of the right of establishment and the freedom to provide investment services in EU countries. These reforms have helped to increase competition in euro area markets and have thereby stimulated the transformation of the Spanish markets to adapt to the new environment. This is the background to the reforms to the book-entry debt market and the changes made in the Spanish derivatives markets, both of which will be analysed below. In short, all these changes have taken place within the more general process of increasing integration of European financial markets, consolidating a trend that had already been apparent in the past (see Box 1).

Against this background, the most prominent developments in relation to the prices of Spanish financial assets in 1999 were the halt to declining interest rates in fixed-income markets and the moderation of the upward trend in equity prices. As for quantities, the boom in private fixed-income markets was notable. This was the extension of a trend that began in 1998, whereby public-sector issues have been gradually losing weight in favour of those made by private companies.

1.1. Fixed-income markets

1.1.1. Yields

In 1999, the decline in yields on public debt markets, which began in 1995, came to a halt (see Chart 1). This turning point was first apparent at the medium and long maturities, where yields began to rise as from February, while yields on short-term debt continued to trend downwards until the middle of the year, in step with the interest rates negotiated in the euro area interbank deposit market.

The upward movement in long-term yields was apparently the result, at first, of the pull exerted by US debt prices, which had been falling since October 1998. The prices of US debt seem to have been hit initially by the return of flows which had fled higher-risk assets during the summer-1998 financial crisis and, later, by fears that the vigorous growth in the US economy would lead to inflationary pressures and a tightening of monetary policy. However, given the different cyclical position of the euro area countries, some of whose economies showed signs of economic slowdown at the beginning of the year, the movements in US debt yields were not completely passed through to euro area

debt. As a result, the spread between US and euro area debt widened to 170 basis points in May 1999 (see Chart 1), the highest level since 1989 if German debt is taken as the benchmark.

During the first few months of the year, the downward path of short-term yields, like that of interbank-deposit-market rates, was driven initially by expectations of an easing of monetary policy in the euro area and subsequently by the 50-basis-point cut in the Eurosystem's intervention rates in April, amid slowing activity and risks of deflation in the area.

As from the middle of the year, the rise in medium and long-term yields tended to strengthen, with certain indicators beginning to show increasingly palpable signs of economic recovery in the Euro area. This time, the rise in yields was greater than on the US market and, moreover, tended to extend to the shorter maturities, initially reflecting market expectations of a future rise in euro area intervention rates. At the beginning of November the Eurosystem's tender rate for its main refinancing operations was raised by 50 basis points.

Yields in November 1999, comparing with December-1998 levels, had risen by 30 basis points in the case of three-month operations, by 60 basis points in that of one-year operations and by 120 basis points in that of 10-year debt issues. The slope of the zero-coupon yield curve, measured by the difference between overnight and 15-year rates had widened to 290 basis points, some 100 basis points up on end-1998. In fact, this slope had stood at 350 basis points before the rise in intervention rates in the euro area at the beginning of November (see Chart 1).

The movements in Spanish debt yields followed a very similar pattern to that set by the yields on the sovereign debt of the euro area countries, so that the spreads between the yields on the debt issued by the various countries remained quite stable. Thus, for example, the spread between the yield on Spanish and German debt at the 10-year maturity fluctuated slightly around the 25-basis-point level. The low volatility of such spreads in 1999 is a consequence of the stability of the markets' assessment of the factors which, now that the currency of issuance is the same, determine the size of such spreads. These include the different credit ratings of the national issuers and the differences in the liquidity of the issues.

By contrast, the 10-year yield spreads between the Spanish and US and Spanish and Japanese debt moved significantly. The spread

Financial integration between international stock exchanges in the nineties

Financial markets are understood to be perfectly integrated when there are no barriers to transactions between them, such as taxes, restrictions on the holding of external assets, information costs or any other cost which makes it more difficult to trade between markets than within them. Where two markets are perfectly integrated, it would be possible to say that they are in fact one single market. During the eighties and nineties, primarily as a consequence of the liberalisation of capital movements and, later, the improvements in telecommunications, there is thought to have been an increase in the degree of integration between international financial markets. However, it is likely that they are still not perfectly integrated since certain barriers, such as taxes and, in some countries, restrictions on the holding of external assets, persist.

Measuring the degree of financial integration between two markets is not a simple task since there is no generally accepted problem-free measure. In the past, the degree of integration between two markets has usually been approximated by the correlation between the prices of the assets traded on them. However, a higher correlation is not a necessary or sufficient condition for a greater degree of integration. To appreciate this point one need only observe that assets traded on the same market are not perfectly correlated and, on occasions, their correlation is even lower than those between assets traded on different markets. For example, an average correlation of 0.47 is obtained between the sectoral indices of the US stock exchange in the second half of the nineties, as against an average correlation of 0.54 between the indices of the main world stock markets (1). This evidence might be mistakenly interpreted as indicating that the integration between international stock exchanges is greater than the self-integration of the US stock exchange.

Recently, a new way of measuring the degree of integration has been proposed in the literature, based on the law of one price. This measure estimates the absolute value of the difference between the prices that would be assigned by two markets to two portfolios each consisting of assets traded on a different market but with identical payoffs. A zero value of this measure would mean that there were no arbitrage opportunities between them, while a positive value would indicate the existence of arbitrage opportunities and the absence of perfect integration. The degree of integration will be greater the lower the value of the measure.

In a recent Research Department study (2), the above measure of integration, with some refinements, is applied to three pairs of stock markets (Madrid, New York and Frankfurt) in order to assess whether there has been an increase in the degree of integration between them during the nineties. The application of this measure runs up against certain practical problems that are overcome in this study by the use of two alternative approaches. In both approaches the measure of integration between pairs of markets is computed by considering different sub-market combinations (each made up of a certain number of securities listed on the same market). To facilitate interpretation of the results measures of relative integration are defined, based on the difference between measures of integration between different markets and those obtained for the same market (3).

The adjoining table shows the average value of the estimates of the relative measures of the degree of integration for each of the three pairs of markets studied, distinguishing between the first and second halves of the nineties (4). Three characteristics can be seen in this table: i) the measures are all positive, which suggests that the market included in the study are not perfectly integrated; ii) the value of the measure fell in every case in the second half of the nineties, which could be interpreted as indicating an increase in the degree of financial integration; and iii) comparison of the countries considered suggests that the integration is greatest, in both the time periods considered, between the Spanish and German markets, while the lowest degree of integration is between the Spanish and US markets.

These results have important implications. For example, owing to the reduction in barriers to transactions between

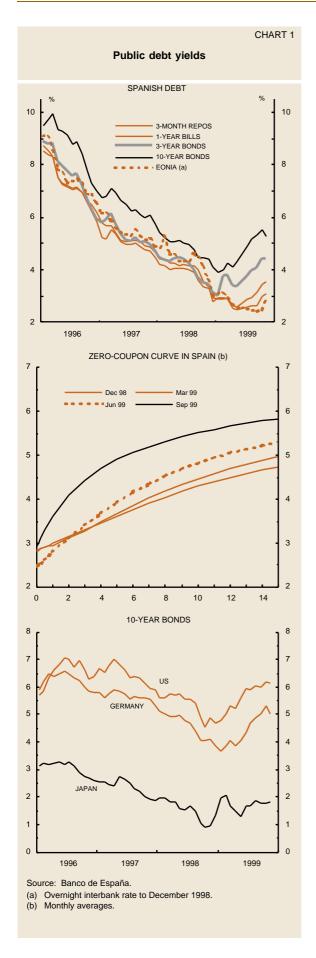
markets, greater integration means improvements in efficiency and in the combinations of risk and return available to investors. This can be seen as a counter-argument to those who hold that financial markets are now too vulnerable owing to the greater interaction between them. Another consequence of greater integration between markets is the reduced scope for the successful pursuit of exclusively domestically focused economic policies.

- (1) See Ayuso and Blanco: "Has financial market integration increased during the nineties?", Banco de España Working Paper 9923.
- (2) Ayuso and Blanco: "Has financial market integration increased during the nineties?", Banco de España Working Paper 9923.
- (3) Although, in theory, the measure of self-integration of a market is zero, problems of estimation may mean that in practice a positive value is obtained.
- (4) These results are based on the second approach considered. The results obtained using the first approach are qualitatively the same.

Measures of relative integration between stock exchanges. Averages in basis points (the lower the value the higher the degree of integration)

	1990-1994	1995-1999
Benchmark market= New York		
New York-Frankfurt New York-Madrid	12.0 19.1	7.0 8.8
Benchmark market = Madrid		
Madrid-Frankfurt	10.7	5.0
Madrid-New York	17.4	7.4

This table shows the averages of the relative integration measures obtained from 10,000 different estimates, based on the same number of combinations of sub-markets each made up of 10 randomly selected assets from each market. In the first two rows the market taken as benchmark to obtain the relative measures is New York, while in the second two rows it is Madrid.



between US and Spanish debt, as mentioned above, widened until May, subsequently narrowed to around end-1998 levels in October and widened again slightly in November. It is notable that the volatility of this spread was significantly lower in 1999 than previously, although similar to the historical volatility displayed by the spread between US and German debt. Meanwhile, the spread between the yields on Spanish and Japanese debt was highly volatile. It fell sharply in January, when issuance by the Japanese government was at very high levels. Subsequently, it recovered to the end-1998 level in March, and thereafter continued to widen to reach 350 basis points in November. In short, the above evidence does not conclusively show that the introduction of the euro has led to an increase in the importance of idiosyncratic factors in price formation on international debt markets (a view held by certain authors). Although the volatility of the spread between euro area and Japanese debt has increased, the volatility of the spread between German and US debt has not changed significantly.

As regards the yields on assets issued by private Spanish companies, the available information suggests that the spreads over government debt narrowed in 1999. This would be consistent with the developments in other international debt markets, such as the US market where, after a widening of spreads during the 1998 financial crisis, they have since returned to around pre-crisis levels. None the less, in the Spanish case this result must be treated with caution because, with the information available, which groups all the issues traded by maturity, it is not possible to control for the issuer's credit rating (2).

1.1.2. Primary markets

As regards issuance volumes in Spanish fixed-income primary markets, the trends already seen in 1998 became much more pronounced in 1999 (see Table 1). General government issuance continued to decline, while the upward trend in the issuance of other resident sectors firmed to the point that, in net terms, their volume of issuance in the period January to September 1999 was more than double that of general government. These developments, as discussed below, are explained by a number of different factors. Notable among these are the smaller government borrowing re-

⁽²⁾ The AIAF market publishes daily the average rates for all the issues traded, distinguishing between certain maturities.

quirement, the inclusion of certain fixed-income securities issued by private firms in the lists of eligible collateral for ESCB monetary policy operations and the new tax treatment applicable to this type of issue.

General government net issuance was positive again in the first three quarters of 1999, having been negative in the final quarter of 1998 due to the high level of redemptions in that period. However, the volume of net issuance was only just over half the level in the same period of 1998. Issuance by the main issuer (the State) continued to be concentrated in the medium and long maturities, so that net Treasury bill issuance was still negative during the first three quarters of 1999. In consequence, the average life of State debt rose from 5 to 5.3 years between end-1998 and September 1999. Territorial government issuance remained moderate in 1999, although the net amounts were higher than in the same period of the previous year. The largest net volumes were in medium and long-term instruments.

As regards issuers other than general government, unlike in 1998, the 1999 boom in the market is not only explained by the buoyancy of securitisation, but also by the fact that growth extended to other issuers and other instruments.

Net issuance by credit institutions in the first three quarters of 1999 was almost three-times as high as in the same period of 1998. The rapid growth in the issuance of this sector partly reflects greater net borrowing as a result of the expansion of credit without an equivalent expansion of customer funds (see Part 2 of this article for a more detailed analysis). The issuance volume of other resident sectors held at a historically high level, although in both the first two quarters of 1999 the net amount was lower than in the final quarter of 1998. Securitisation operations continued to account for a very significant part of the volumes issued by these sectors.

By maturity, the most active segment of private-sector issuance was that of medium- and long-term operations. Notwithstanding this, the growth of short-term operations (commercial paper) was notable, boosted by the more advantageous tax treatment for legal persons, following the elimination, as from the beginning of 1999, of withholdings on their returns. This measure, which has been applied to all bookentry fixed-income securities traded on organised markets, has entailed, in the case of commercial paper, the elimination of withholdings on all transactions. The impact of the change in tax treatment on medium- and long-term debt

has been less significant in so far as only coupon payments were previously subject to withholdings (see Box 2).

The effect of all these developments has been a continuation of the rise in the weight of the outstanding securities issued by resident companies in all domestic fixed-income issues. This weight reached 19.5 % at the end of the third quarter of 1999, 3.9 percentage points higher than at end-1998 (see Chart 2). As mentioned above, this is explained by a combination of several kinds of factor, most of which were already active in 1998. On the supply side, the reduction in the public deficit has reduced the State borrowing requirement leaving room for the issues of other sectors. At the same time, various regulatory changes introduced in 1998 have facilitated the issuance of fixed-income securities by private sectors by increasing the flexibility and simplifying and lowering the cost of the issuance process and by widening the range of instruments available. In particular, the introduction of the programme prospectus enables more than one issue to be made without a full prospectus being required for each, and the admission prospectus (3) has been eliminated. In addition, the extension of the regulation of securitisation (4) has introduced greater flexibility into securitisation operations and has widened the range of securitisable assets.

On the demand side, the inclusion of certain fixed-income securities issued by private firms in the lists of eligible collateral for ESCB monetary policy operations has boosted the demand for this type of security from credit institutions. Also, the new tax treatment applicable to the fixed-income issues of private firms (which, as mentioned above, exempts legal persons from withholdings on the returns obtained and brings their tax treatment into line with that of State debt) has stimulated the demand for these instruments. Finally, the greater stability of the Spanish economy and the lower nominal yield on lower-risk assets is another factor helping to stimulate a shift of investment from assets issued by the State towards others with a higher expected return and, in consequence, a greater risk, such as fixed-income securities issued by private firms.

⁽³⁾ These measures were introduced in Royal Decree 2590/1998 on changes to the legal regime for the securities market, known as the "Omnibus Royal Decree". For further information see "Financial regulation: fourth quarter of 1998", in Economic bulletin, Banco de España, January 1999.

⁽⁴⁾ Royal Decree 926/1998 of 14 May. For further information see "Financial regulation: second quarter of 1998", in Economic bulletin, Banco de España, July 1998

TABLE 1 Net issuance of fixed-income securities (a) **EUR** millions 1998 1999 1998 1999 Q1-Q3 Q1-Q3 Q4 Q1 Q3 13,635 7,922 -8,571 5,230 2,407 285 **General government** 4,011 2.348 -23 12.484 6.336 -9.607 State -11,846 Short-term -11,018 -2,122 -7,277 -1,382 -2,359Medium- and long-term 24,330 -7.4853,730 2,336 17,354 11,289 Territorial government 1,151 1,586 1,036 1,219 308 Short-term 62 107 172 144 43 -81 Medium- and long-term 1,089 1.479 865 1.075 16 388 **Credit institutions** 3,753 11,198 -58 4,865 2,789 3,544 Short-term 6,690 -25 2,103 1,205 3,382 Medium- and long-term 3,739 4,508 -33 1,584 162 2,761 2,884 1,041 3,914 Other resident sectors 2,885 7,352 2.398 Short-term 328 699 72 680 -269 288 Medium- and long-term 2.557 6.653 2.812 1.718 1.309 3.626 Fuente: Banco de España. (a) Including issues of residents denominated in both domestic and foreign currencies.

All of these trends will foreseeably intensify in the future. The Stability and Growth Pact will lay the foundations for a reduction in the weight of public debt in the financial markets. At the same time, the low weight of securitisation in Spain in comparison with more developed markets, like those in the US and Germany, portends further expansion of fixed-income instruments associated with securitisation operations. in an environment in which economic stability will continue to help steer investors towards higher risk assets. In this context, the agreement between AIAF (Association of Securities Dealers), the stock exchanges and the SCLV (Securities Clearing and Settlement Service) to harmonise the settlement procedures for the fixed-income securities traded on these markets will help to increase the attractiveness of private fixed-income instruments in so far as the costs of secondary market trading will be lower.

Finally, it is worth pointing out that the growing weight of assets issued by the private sector is a general trend that is also discernible in other international markets. After all, a large number of the explanatory factors mentioned above (such as the shift in demand towards higher risk assets and the decline in the State borrowing requirement) are also relevant at the international level. Besides these factors, the available evidence suggests that emerging market issuers have increased their recourse to debt financing on international markets, after their withdrawal following the international financial crisis in 1998.

The available information on world-wide debt issues reveals a high level of activity in these markets in 1999. In the first half of the year the net volume was 30 % higher than in the same period of 1998 and well above the quarterly volumes recorded in recent years. As in the Spanish market, the buoyancy of world debt markets in 1999 was essentially due to the behaviour of the private sector. The information available for the third quarter, relating solely to the international segment (placements outside the issuer's country, generally made simultaneously in several countries), confirms that the world primary debt markets remained buoyant.

With regard to the nationality of the issuers, the growth in the volume of net issuance has been very much across-the-board, although it has been particularly strong in the case of euro area issuers. In the first quarter of 1999 the weight of these issuers in total net issuance was 24 %, a higher proportion than in previous quarters. Nonetheless, US issuers continued to account for the largest proportion of new issues during the same period, with 46 % of the total. By currency, the relative growth in euro issuance is notable. During the first half of the year the amount of net issuance in that currency represented 25 % of the total. This was higher than the recent historical average weight of net issuance in the currencies replaced by the euro (around 16 %). The growth in the weight of euro issuance has also been more apparent in the international segment, where the proportion of net issuance in that currency was 43 % in the first half of 1999 (only 6 percentage points be-

BOX 2

The new tax treatment for financial assets in 1999

New income tax provisions for residents and non-residents and new regulations on withholdings (1) have, since January 1999, transformed the tax treatment and system of withholdings for financial assets held by residents and, to a lesser extent, by non-residents. Owing to the magnitude of these changes and their implications for domestic financial flows and, to a greater extent, for the development of certain Spanish securities markets, this box focuses on the changes in tax regulations and their effects on resident individual (natural person) and institutional (legal person) investors.

As regards tax treatment, the most notable changes can be summarised in three points. First, the taxation of a number of financial assets previously with different tax treatments has been standardised. As from 1999, returns on most financial assets, excluding mutual funds and shares, are taxed as income from capital irrespective of the taxable event concerned (transfer, redemption or payment of interest). As a result, returns on financial assets that were previously taxed as income from capital and capital gains are now taxed exclusively as income from capital.

Second, the distinction between regular and irregular income has been dispensed with, so that the average rates for the taxation of unearned income have been abolished, and all unearned income is taxed at the marginal tax rate. Also, the inflation-adjustment coefficients have disappeared.

Third, a number of reliefs have been established in the taxation of income from capital, ranging from 30 % to 70 % depending on the investment period and the type of asset concerned. In general, a 30 % relief is applied to income from capital if the investment period exceeds two years. In the specific case of life-assurance contracts the exemption is 60 % if the investment period exceeds five years and 70 % if it exceeds eight. The recent interpretation given by the tax authorities to unit-linked (2), whereby they are considered to be life assurance linked to mutual funds, has eliminated many of the uncertainties surrounding the taxation of such assets.

As regards the system of withholdings of personal income tax and corporate income tax the main changes for financial assets can be summarised as follows. First, a 20 % withholding is introduced for all capital gains made on shares in portfolio investment institutions although the calculation must take into account any applicable adjustment coefficients. Also, withholdings on income from capital are reduced for borrowed funds (basically debt instruments and bank deposits) from 25 % to 18 %. Likewise, it is provided (in the law accompanying the 2000 budget) that as from the year 2000 the withholding on dividends will be reduced from 25 % to 18 %. At the same time, income arising from marketable book-entry fixed-income securities traded on official Spanish secondary securities markets and issued after the entry into force of the Royal Decree shall be exempt from withholdings of corporate income tax (mainly institutional investors). This means, for institutional investors, that the systems of withholdings for public and private debt and for Treasury bills and commercial paper have been standardised.

Furthermore, Income obtained upon the transfer of coupon-paying financial assets (mostly coupon bonds) that fulfil the same conditions as established for corporate income tax, i.e. newly issued marketable book-entry fixed-income securities, is exempt from withholdings of personal income tax. Also, although the general 25 % withholding is maintained, it is confirmed that a 25 % withholding shall be applied to income from life-assurance contracts (note that prior to 1999 there existed life-assurance contracts which generated capital gains and were thus exempt from withholdings). Finally, the obligation to make payments on account of income paid with a frequency of less than once a year has been abolished.

These changes to taxation and the system of withholdings have important implications for the development of the Spanish financial markets. First, the standardisation of the taxation of public and private fixed-income assets has given a considerable boost to the trading and issuance of private securities. This expansion has been proportionately greater in the case of short-term securities (commercial paper) than in that of long-term securities (bonds). Second, they have boosted the development of bank time deposits, in particular those at more than two years. With the 30 % relief on the income, the post-tax return has improved for medium-and low-income investors. Indeed, financial innovation is generating banking products linked to indices and other references, enabling investors to obtain a premium over guaranteed interest rates.

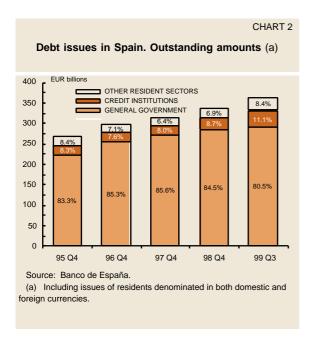
Furthermore, the new system of withholdings is a disincentive to the growth of mutual funds, especially money-market funds (FI-AMMs). In addition to their low financial return due to the low interest rates on money markets, there is now the tax cost arising from the 20 % withholding on account. Finally, there has been a further expansion in the marketing of unit-linked by banks, savings banks and insurance companies. In practice these instruments enable investors to invest in mutual funds, with the advantage of being able to switch between funds without any tax implications, and also to pay less tax in the medium and long term.

(1) Law 40/1998 of 9 December 1998 and Royal Decree 214/1999 of 5 February 1999; Law 41/1998 of 9 December 1998 and Royal Decree 326/1999 of 26 February 1999 and Royal Decree 2717/1998 of 18 December 1998, respectively.

(2) "Unit-linked" are hybrid financial assets since, although they have the legal form of life assurance, in practice the policy-holder (the investor) can choose between various funds or baskets of funds for his investment and can even change this choice on successive occasions.

Type of instrument	Classification for tax purposes	Taxable event	Тур	e of income
Type of instrument	Classification for tax purposes	raxable event	1991 & 1996 Laws	1998 Law
ANK DEPOSITS	Discount instruments (at less than 2 years)	Interest	IFC	IFC
	Discount instrument (at more than 2 years)	Interest	IFC	IFC+
OVERNMENT SECURITIES) Fixed-income only)	Discount instruments (Treasury bills)	Transfer and redemption	IFC	IFC+
2,	Coupon-paying instruments (State bonds)	Interest Transfer and redemption	IFC CNW	IFC+ IFC+
PRIVATE FIXED- INCOME SECURITIES	Discount instruments) (commercial paper)	Transfer and redemption	IFC	IFC+
	Coupon-paying instruments (private bonds)	Interest Transfer and redemption	IFC CNW	IFC+ IFC+
QUITIES	Shares	Dividends Transfer and redemption	IFC CNW+IAC+exemptions	IFC+ CGL
MUTUAL FUNDS	Mutual-fund shares	Dividends Transfer and redemption	IFC CNW+IAC+exemptions	IFC+ CGL
NSURANCE CONTRACTS	Life assurance and unit linked	Income type Capital type	IFC CNW+IAC+exemptions	IFC+reliefs IFC++

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hind the dollar), as against 34 % in 1998 and 24.6 % in 1997.

1.1.3. Secondary markets

Trading volumes on Spanish secondary debt markets have continued to grow in most markets and segments, although with appreciable differences from market to market, partly reflecting the different developments in the various primary markets (see Table 2).

In the book-entry public-debt market there was moderate growth in trading. In spot transactions the overall growth of volumes was particularly strong in the non-market-member segment. As regards instruments, spot bond transactions accounted for a growing proportion of activity while, in line with primary markets, volumes of bill transactions fell in relation to 1998.

These developments in activity on the public-debt market occurred amid structural changes in the market. The rights and obligations of market makers have been extended and, for the first time, non-resident entities are permitted to enjoy this status. These measures aim to increase market liquidity by increasing the extent of market makers' obligations to quote bid and ask prices. Also in 1999, the four screens of the "blind-broker" system were merged into one single screen to which traders have access. In short, these reforms will help to increase the attractiveness of Spanish public debt by making the market more liquid.

In the AIAF (Asociación de Intermediarios de Activos Financieros; Association of Securities

Dealers) market, the rise in trading volumes in the fourth quarter of 1998 was consolidated in 1999. In the first three quarters volumes were three times higher than in the same period of 1998. Mortgage certificate and bond transactions continued to account for most of the activity in the market thanks to the buoyancy of securitisation-bond transactions, whose volumes represented around half of all trading on the AIAF market. The increase in activity in this segment is basically explained by the growth in repurchase agreements directly and indirectly related to the counterparties' operations to obtain liquidity for Eurosystem tenders. Such operations have been performed since the fourth guarter of 1998, when certain assets traded on this market became acceptable as collateral for monetary-policy tenders. In addition, since October 1998, the segment has had the benefit of the resolution of the Council of the National Securities Market Commission (CNMV) which made it possible for a new instrument - preference shares - to be listed on the AIAF market. This is a hybrid fixed-income/equity instrument usually issued by subsidiaries of Spanish credit institutions located abroad.

Activity has also been strongly expansionary in the notes segment. This has been a consequence, given the importance of operations to re-place issued securities, of the buoyancy of the primary market and also of the more favourable tax treatment applicable to secondary-market transactions in these instruments.

By contrast, matador-bond trading volumes have fallen as a consequence of the reduction in the outstanding stock of securities, a result of issuers' loss of interest in this market following the disappearance of its main distinguishing element as a consequence of monetary unification.

Unlike in other markets, there was a decline in total fixed-income trading volumes on stock markets. This is attributable to the decline in the segment in which most of the activity of this market is concentrated (that of transactions in territorial-government securities). By contrast, the trading volume for assets issued by private firms increased significantly in relation to 1998.

As a consequence of the developments in primary and secondary markets there have been certain changes in the distribution by type of holder of fixed-income assets issued in Spanish markets. As regards public debt, the most notable aspect has been the increase in the holdings of non-resident investors. As at end-September 1999 they held 25 % of State debt outright, four-and-a-half percentage points

Trac	ding volumes	on secondary	fixed-income	markets		
						EUR millions
	1998	1999	1998		1999	
	Q1-Q3	Q1-Q3	Q4	Q1	Q2	Q3
Book-entry public						
debt market	10,975,396	11,085,283	3,138,358	3,319,309	3,446,815	4,319,159
Spot transactions	1,811,700	1,881,240	511,017	647,331	711,981	521,928
State	1,804,540	1,876,223	506,614	645,349	710,113	520,761
Bills	74,535	64,369	25,733	22,792	18,211	23,367
Bonds	1,730,005	1,811,854	480,881	622,557	691,903	497,394
Territorial government	7,160	5,017	4,403	1,982	1,868	1,166
Forward transactions	19,397	18,207	6,434	7,914	5,991	4,303
State	18,911	17,886	5,777	7,720	5,916	4,251
Territorial government	486	321	657	194	75	52
Repos	9,144,299	9,185,836	2,620,907	2,664,065	2,728,843	3,792,929
State	9,094,942	9,141,275	2,605,111	2,652,753	2,710,737	3,777,785
Territorial government	49,357	44,561	15,796	11,312	18,105	15,144
AIAF market	19,572	60,435	23,548	18,915	17,200	24,319
Commercial paper	5,282	14,916	2,652	2,865	3,565	8,486
Bonds and mortgage certificates	9,407	43,518	19,354	15,423	12,615	15,480
Matador bonds	4,883	2,001	1,542	627	1,020	353
Stock market	40,043	32,451	13,105	10,574	11,114	10,763
State	490	142	113	100	33	8
Territorial government	39,002	30,840	12,789	9,947	10,526	10,367
Other	551	1,470	203	527	554	388

more than at end-1998. There is no information on the distribution of private debt by holder. However, the information available on the placement of fixed-income issues registered with the CNMV also shows an increase in the holdings of non-residents in 1999. These investors increased their holdings from 10 % in 1998 as a whole to 19 % in 1999.

1.2. Equity markets

1.2.1. Price developments

After the high revaluations since 1995, Spanish equity prices in 1999 were characterised until October by the absence of any definite general trend. The Ibex-35 index then stood at around the end-1998 level (see Chart 3) However, as from the beginning of November, there was a clear upward trend, basically led by the telecommunications sector, which took the gain from end-1998 to end-November to 11.4 %.

Price developments in 1999 were the result of a number of opposing factors. Among those with positive effects were the signs of improvement in the international economic environment, visible since the beginning of the year and, later on, the prospects for recovery in the euro area. This change of scenario has had a positive impact on the earnings forecasts of listed companies and, particularly, on those whose profit and loss accounts are most closely linked to the business cycle. This scenario was also supported by the publication of earnings figures that were generally more favourable than initially forecast.

On the other hand, the increase in market interest rates, especially long-term rates, has had a negative impact on stock prices through two channels. First, higher interest rates make equities less attractive relative to fixed income and, second, they have a negative impact on the future earnings of indebted companies by raising their financial costs.

Across firms price movements were very different, reflecting differences in the markets' assessment of the prospects of the sectors to which they belong. Among the sectoral indices of the Madrid stock exchange, the largest rises were in the communications index (up 58 % in the period January-November 1999), mainly attributable to the price of Telefónica which, like that of most other European firms in this sector, soared amid good prospects for the growth of the telecommunications business in the next

few years. Another sector whose index rose notably was oil (up 23.6 %), where firms benefited from rising crude prices. The banking sector, with a high weight in Spanish stock markets, also performed better than the general index, although the gains were relatively moderate (15.3 %).

The share prices of firms in the electricity sector fell due to the reduction in tariffs and also due to the increase in interest rates, since these firms have high levels of debt (the electricity index of the Madrid stock exchange fell by 10.8 %). Finally, there were also notable falls in the share prices of firms in the construction and food sectors (–27.3 % in the construction sector index and –18.2 % in that of the food sector).

Spanish indices did not perform as well as those of the main international stock exchanges (see Chart 3). Of these, the best performing was the Tokyo exchange's Nikkei 225, which from end-1998 to end-November 1999 rose by 34 %. Prices in this market were boosted by the improvement in the prospects for economic recovery in Japan, starting from a very depressed situation. The S&P 500 US stock market index rose 13 % over the same period, amid continuation of the current expansion of the US economy at a higher rate than initially forecast. However, the increases in US interest rates and fears of further rises in future moderated the upward trend to some extent. Finally, the broad Dow Jones Euro Stoxx index of euro area stock markets rose by 21.7 %, led by firms in the technology and industrial sectors. In fact, the lower relative weight of this type of firm in the Spanish market indices would partly explain the lower rises in Spanish stock markets. At the same time, the revaluation of technology-sector firms, which has also occurred in the US market, has been notable for its size and for the fact that many of these firms are loss-making, giving rise to doubts as to its sustainability. In Spain, the most striking example has been that of Terra, a subsidiary of Telefónica. Its share price almost quadrupled in less than one month following the IPO in November. In fact, the valuations of these shares suggest that the markets are discounting the existence of high potential profits in the future. Some of these firms will probably never make these profits, especially if certain areas of business, such as the Internet, end up dominated by a few firms. Accordingly, investment in this type of asset involves a very high element of risk.

Another notable aspect of developments in Spanish stock exchange indices was their relatively low volatility during most of 1999, especially when compared with developments during the financial crisis in the previous year. The

main exception to this stability was in the middle of January, at the time of the announcement of the widening of the Brazilian real's fluctuation bands against the US dollar.

1.2.2. Primary markets

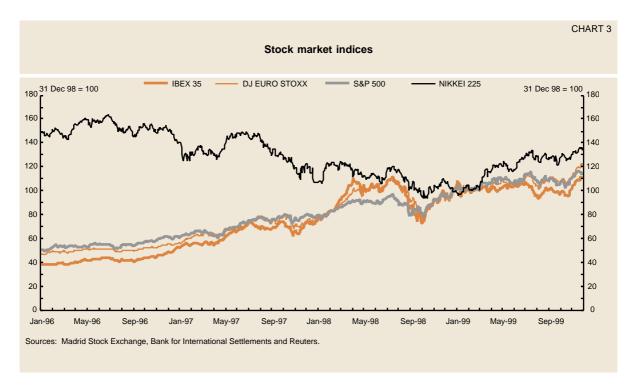
The supply of equities increased notably during the first three-quarters of 1999, both through capital increases and IPOs (see Table 3). This development was stimulated by the increasing tendency for agents to invest in this kind of security. Given the lower nominal returns on lower-risk assets, agents are tending to shift their investments towards assets with higher expected returns and, consequently, a greater risk.

Capital increases were at historically high levels in the first three quarters of 1999, even exceeding the exceptionally high volumes during the same period of 1998. Non-financial firms raised a large amount of finance in this way, with Repsol's capital increase in July to finance the purchase of the Argentine firm YPF being especially notable.

Capital increases in 1999 had the benefit of a more flexible regulatory framework (5), which facilitates and simplifies such operations. As mentioned above, the new regulations have made the issuance formalities less stringent by abolishing the admission prospectus. Furthermore, the new regulations have made it possible to register increases in capital before they are actually carried out and they facilitate and envisage the issuance of several types of shares, including callable and non-voting shares, shares paying preferential dividends and preference shares. However, as yet no firm has used any of these instruments.

In the first three quarters of 1999, the amount of public offerings was below the level in the same period of the previous year (see Table 3), this being attributable to the decline in the number of privatisations. Unlike in previous years, in 1999 the bulk of these operations did not involve the privatisation of state-owned firms, but rather IPOs. Some of these operations had been scheduled for the second half of 1998, but on account of the international financial crisis were postponed until the first half of

⁽⁵⁾ The Omnibus Royal Decree and Law 37/1998, reforming the securities market law introduce certain changes in the commercial regulation and financial supervision tending to simplify the issuance of securities. In addition, the Law accompanying the budget completed some of these changes.



1999, including notably those of Ferrovial, Mecalux, Azkar and Parques Reunidos. These operations were generally favourably received by Spanish investors, who have displayed an increasing tendency to invest in equities. IPOs continued in the fourth quarter. That of the Telefónica subsidiary Terra was notable, with purchase orders far in excess of supply and (as mentioned above) very large price rises in the initial trading sessions.

1.2.3. Secondary markets

Trading volumes on the Spanish secondary equity markets continued to grow in 1999 (see Chart 4), although at more moderate rates than in recent years. Moreover, part of the growth in activity in 1999 was attributable to certain exceptional operations, relating to the exchange of shareholdings between the former Banco de Santander and Banco Central Hispano, which were carried out in the second quarter of 1999 off market.

Security loan transactions continued to grow in importance in 1999. At end-September the outstanding amount of such transactions stood at EUR 8.5 billion, 11.4 % higher than at end-1998.

The size and activity of Spanish stock markets is shortly to be increased thanks to the recently created market for Latin American firms. This Madrid stock exchange initiative means that certain firms from Latin American countries can be traded through the Spanish stock mar-

ket electronic trading system, with settlement through the SCLV.

Finally, as regards the distribution of equities by holder, as in the case of fixed-income markets, in 1999 an increase in the holdings of nonresident investors was discernible. On information to July, the net investment by these investors in the primary and secondary equity markets remained positive in 1999, although at a lower level than in the same period of the previous year. The weight of the activity of these investors in the secondary market increased slightly in the same period, rising from 40 % to 44 %. In addition, the information on the placement of the issues and public offerings registered with the CNMV in the first four months of 1999 shows a significant increase in the proportion placed with non-residents compared with the information for the whole of 1998 (up from 32 % to 55 %). This has been mainly at the expense of the household sector. The smaller number of public offerings in 1999, which usually attract large numbers of small investors, could be one of the main factors behind this development.

1.3. Derivatives markets

The derivatives markets, especially the fixed-income segment, have seen the most rapid transformation following the introduction of the Euro. The integration of euro area money markets and the elimination of exchange risk have entailed an increase in competition between European derivatives markets, as the

	Canital inc	reases and p	ublic offering	ie		TABLE 3
	Capital Inc	ireases and p	donc onemi	js		EUR millions
	1998	1999	1998		1999	
	Q1-Q3	Q1-Q3	Q4	Q1	Q2	Q3
Capital increases	8,835	9,765	616	1,141	1,327	7,297
Credit institutions	4,839	838	36	128	112	598
Other sectors	3,996	8,927	579	1,013	1,215	6,699
Public offerings	11169	3,377	71	601	1,985	791
Privatisations	10,857	772	0	393	0	379
Other	312	2,605	71	207	1,985	412
Sources: Sociedad de Bolsas a	and Banco de España.					

substitutability of the products linked to the fixed-income instruments traded in these markets has increased substantially. The markets have reacted to this situation by establishing alliances and in certain cases by making changes to their operating structure. In 1998, the German DTB derivatives market joined up with the Swiss SOFFEX market to form the EUREX market. Subsequently, the Spanish, French, Portuguese and Italian markets formed an alliance called Euro-Globex, the European part of Globex, the global network of futures exchanges which also includes the US CME market. The British LIFFE market decided to replace "open-outcry" trading by an electronic system like the one used in the continental markets. More recently, the Council of MEFF (Spanish Financial Futures and Options Market) has resolved to integrate the management of the companies MEFF Renta Fija and MEFF Renta Variable.

In markets trading in equity-based instruments the competition has focused on the launch of new contracts based on aggregate indices for the euro area and other European countries.

The agreement between the markets integrated in Euro-Globex came into effect at the beginning of 1999 for contracts on interbank interest rates. Under the agreement the Spanish MEFF RF market was interconnected with the French MATIF market and MEFF RF members were given access to trading in the 3-month Euribor futures contract, the order book for which is run by MATIF. MEFF RF members continue to settle their transactions through MEFF RF, while their net positions are settled in an account opened with MATIF by a securities-dealer company, MEFF Euro Services, formed for the purpose.

In the middle of the year the agreement was extended to other MATIF products (bon notionnel) and to equity products (pan-European-index futures), although in the latter case the parties to the agreement were MEFF RV and the French market MONEP. From the end of the summer MATIF members have had access to trading in the MEFF RF-notional-bond futures contract.

As regards trading volumes, in 1999 there was a very sharp fall in transactions involving MEFF RF-listed contracts (see Table 4). The explanation for this lies, first, in the fact that market members' activity in three-month Euribor futures carried out through Euro-Globex is not recorded by MEFF RF but by MATIF. However, the cumulative volume of MEFF RF and MATIF interbank-rate futures contracts continued to decline in the period January-September 1999 in relation to the same period of the previous year. The decline in activity in MEFF RFlisted contracts is also attributable to the shift in bond-contract transactions to the Eurex market (see Chart 5). This market has rapidly absorbed the bulk of trading in derivatives on euro area government bonds. MEFF RF reacted to this situation by launching a new contract with an underlying asset made up of a basket of bonds issued by several euro area governments. However, as trading in this new contract did not reach significant volumes MEFF RF's strategy is now focused on marketing products listed on other markets instead of launching its own products. This is the background to the recent agreement between MEFF RF and Eurex whereby MEFF RF members have access through their screens to trading in the Eurex public-debt contract.

Recent developments in activity in European derivatives markets therefore show the growing concentration of transactions in euro-interestrate contracts in a single market (see Chart 5).

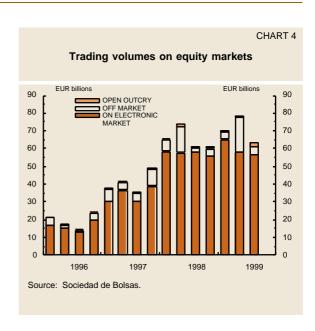
In the case of interbank-rate contracts this market is the British LIFFE market, while activity in contracts linked to medium- and long-term rates is concentrated in the Eurex market.

As regards activity in equity-based contracts, MEFF RV trading volumes have been more stable. In the first quarter activity grew, but in the second and third quarters the amount traded slowed. As a consequence, the total trading volume in the first three quarters of 1999 was 3.6% higher than in the same period of 1998. In terms of instruments, the weight of Ibex-35 futures in total trading rose due to a fall in the trading volumes of options contracts on the same index. By contrast, the volumes of transactions in options on individual securities grew in relation to the previous year, although their relative weight in total trading remains very low.

2. FINANCIAL INTERMEDIARIES

During the first three quarters of 1999, Spanish financial intermediaries conducted their business against a background of vigorous economic growth, low interest rates and the absence of any clear trend in stock market prices. As a result, a strong growth rate in lending was sustained and the growth of the net asset value of mutual and pension funds was lower. The internationalisation of the investment portfolios of pension funds, insurance companies and deposit money institutions likewise continued, as did switching towards higher-risk assets such as private fixed income or equities. Contributing to this re-shaping of portfolios were the greater issues of commercial paper and of other private fixed-income securities, discussed in Part 1 above in which banks participated actively as issuers. Nonetheless, these issues were not so high as to offset the fall in public debt issues. whereby a shortage of negotiable instruments on the domestic market persisted, encouraging investment in other assets of the euro area. This was particularly notable in the case of money-market funds (FIAMMs by their Spanish name), but also in other groups of institutions such as securities funds (FIMs) or deposit money institutions.

The relatively unfavourable trend to October of the prices of financial assets and the recent tax changes (see Box 2) contributed to the pickup in bank deposits and to the decline in net subscriptions to mutual funds. Notwithstanding, the growth of customers' funds did not suffice to finance the growth of credit. Consequently, deposit money institutions continued to resort to net external financing, essentially interbank borrowing, which increased the net external debit position of these institutions.



Against this backdrop, deposit money institutions' profits in the first nine months of the year continued to grow in relation to 1998. That said, this increase was based exclusively on the favourable course of credit-risk and securities write-downs, whereas net income fell for the first time since 1995.

2.1. Deposit money institutions

Deposit money institutions (banks, savings banks and credit co-operatives) are the main component of the Spanish financial system. Faced with heightening competition with one another, with foreign banks and with other financial entities, these institutions are immersed in an ongoing process of adaptation to the new environment in place as a result of external openness, EMU and technological change. This section reviews the activity of these institutions during the first nine months of 1999 (6). An analysis is first made of the structure of their assets and then of their liabilities, and finally their margins and costs are studied. Annexed to this paper is a comparative analysis of the performance of commercial banks and savings banks, with a somewhat broader time frame. Notably, the two biggest mergers in the sector's history came about or were announced in 1999, giving rise to two groups -BSCH and BBVAwhich respectively account for 20 % and 21 % of the sector's total assets.

⁽⁶⁾ Other credit institutions, such as specialised credit institutions (SCIs) or the ICO (Official Credit Institute), are not analysed in view of their relative lesser significance and, in the case of the ICO, its specific characteristics. Drawing on 1998 figures, SCIs accounted for 2.4 % of the total assets of credit institutions.

Trading volumes on derivatives markets (a)

TABLE 4

EUR millions

	1998	1999	1998		1999	
	Q1-Q3	Q1-Q3	Q4	Q1	Q2	Q3
MEFF RF (fixed-income)	1,825,416	319,725	286,569	141,272	110,858	67,596
Short-term	987,016	19,939	138,426	13,927	5,181	831
Futures	940,539	19,039	137,344	13,867	4,341	831
Options	46,477	900	1,082	60	840	0
Medium- and long-term	838,399	299,786	148,144	127,345	105,676	66,765
Futures	794,632	299,699	145,995	127,274	105,666	66,759
Options	43,767	87	2,149	71	11	6
MEFF RV (equities)	427,100	441,599	129,250	161,413	145,203	134,983
lbex 35	422,098	431,640	127,231	159,241	141,459	130,941
Futures	347,116	376,587	110,135	144,143	121,449	110,995
Options	74,982	55,054	17,095	15,098	20,010	19,946
Stock options	5,002	9,959	2,020	2,172	3,744	4,042
MATIF						
Short-term. Futures	3,463,216	2,749,773	600,314	1,201,693	891,088	656,992

Sources: MATIF, MEFF RF, MEFF RV and Banco de España.

Despite competition from other financial intermediaries, Spanish deposit money institutions' business continued to grow significantly in 1999. Although average total assets (ATA) grew by only 4.8 % in the first three quarters of the year compared with the same period a year earlier (which was below nominal GDP growth for the first time in recent years), the fall in the growth rate was attributable to the decline in foreign bank branches' assets (-15.1 %) and to the effect of bank mergers (7). Without these two effects, the overall growth of deposit money institutions' ATA would not have differed greatly from 1998 (8.6 %).

Since September 1998, seven foreign banks (five of which Japanese) have closed their branches in Spain. Moreover, the activity of some of the branches of foreign banks still in Spain has diminished as a result of their treasury operations being concentrated in other European centres following the arrival of the euro. Further, the merger in October 1998 of Banco Exterior, Banco Hipotecario, Caja Postal and Corporación Bancaria de España entailed the cancellation of interbank operations among the aforementioned institutions, thereby affecting the comparison of the nine-month period in

1999 with the same period in 1998 (8). Both effects had a bearing exclusively on commercial banks, while savings banks and credit co-operatives showed growth in ATA (11.3 % and 10 %, respectively) far higher than that of banks and, in the case of savings banks, higher even than one year earlier.

The overall non-futures off-balance-sheet operations of deposit money institutions (i.e. contingent liabilities and contingent commitments and risks) continued to increase in proportion to the total balance sheet (see Table 5).

2.1.1. Asset structure

On the assets side, credit grew at a notable rate of over 10 % year-on-year for the third consecutive year. The strong expansion was essentially driven by the greater demand arising from lower interest rate levels, the favourable economic outlook and the improved financial position of households and firms in recent years. Offsetting this growth in credit was a significant decline in interbank assets, predominantly in banks. Overall, as a percentage of ATA, interbank assets were lower by more than five percentage points, while credit exceeded 50 % of total assets (see Table 5). Somewhat

⁽a) The volumes are expressed in monetary units and have been obtained by multiplying the number of contracts traded by their size.

⁽⁷⁾ Unless otherwise indicated, all the data in this report correspond to the aggregation of the institutions existing at each point in time; consequently, some of the changes may be due to new institutions coming into being or others ceasing to operate.

⁽⁸⁾ The merger of BCH and Banco Santander has a lesser effect given that it occurred in April, thereby affecting the 1999 growth rate to a lesser extent.

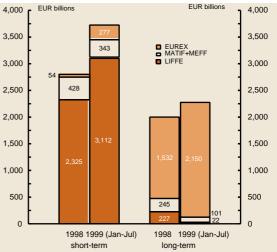
over half of the decline in interbank assets may be explained by the above-mentioned factors: the merger of Banco Exterior, Banco Hipotecario, Caja Postal and Corporación Bancaria de España, and the reduction in the activity of branches of foreign banks. The rest of the decline was due to the fall in interbank assets visà-vis non-resident institutions, which will be discussed in the section on external financing.

The growth of credit was concentrated in operations with the resident private sector, with a rate of increase of 16.8 % (see Table 6). This growth would rise to 18.7 % if regard were also had to credit in the form of securities purchases (including assets issued by mortgage securitisation funds held by the institutions). Conversely, credit to non-residents and to general government fell in relation to the period January-September 1998. Under credit to the resident private sector, virtually all the items grew notably with the sole exception of credit to other (non-credit) financial institutions and doubtful loans. However, the growth of household consumer credit ran at over 20 % during the first two quarters of 1999, and that of mortgage loans was strong. By maturity, credit at over five years posted the highest growth rates, although the share of floating-rate loans in deposit money institutions' overall lending continued to rise, accounting for 47.6 % of total credit.

As earlier mentioned, both low interest rate levels and the buoyancy of the economy have contributed to the expansion of credit. Other factors (indicated in the 1998 Annual Report) include the improvement in the financial position of households and firms and corporate restructuring. The fall in interest rates in recent years has significantly lessened the interest burden on corporate and household debt, enabling these agents to take on higher levels of indebtedness. In relation partly to the fall in interest rates, the prices of equity instruments have risen strongly over recent years, leading to an increase in the net wealth of households, which account for an increasingly greater proportion of the equity-holding (directly or indirectly) sectors as a whole. Finally, the start of EMU has added renewed momentum to corporate restructuring processes, including the acquisition of companies in Spain or abroad. This, together with the setting up of new firms, spurred by the economy's cyclical position, has no doubt also contributed to fuelling the demand for bank credit.

Against this background of growth in the demand for credit, deposit money institutions continued to cut interest rates on new credit transactions for most of the period under study, in line with the trend of interbank interest rates. The rises recorded in the rates of medium and





Sources: Eurex, Matif, Liffe, MEFF RF, MEFF RV and $\,$ Banco de España.

- (a) The volumes are expressed in monetary units and have been obtained by multiplying the number of contracts traded by their size.
- (b) The contracts included in each case are the following: MATIF: Short-term: 3-month Pibor and 3-month Euribor. Long-term: ECU Bond, Euro All Sovereigns, 5-year Matif, 5-year Euro, 30-year E-Bond, Notional Bond and Eurobond.

EUREX: Short-term: 1-month Euromark, 1-month Euribor, 3-month Euromark and 3-month Euribor. Long-term: Schatz, Euro Schatz, Bobl, Euro Bobl, Comi, Conf, Euro Buxi, Jumbo-Pfandbrief, Euro Jumbo-Pfandbrief, Bund and Euro Bund.

LIFFE: Short-term: 3-month Euromark, 3-month Eurolira, 3-month Euribor. Long-term: Bund, Bobl, BTP, Euro Bund and Euro BTP. MEFF: Short-term: Mibor 90 and Mibor 360. Long-term: 10-year notional bond

long-term government debt were not reflected in lending rates until after June and July, when they touched bottom. Thereafter, until October (the latest figure available as this report went to press), there were significant increases, although these varied according to the type of instrument and institution. The most marked increases were on unsecured medium and longterm loans, while the increases on mortgage loans remained low owing to the greater relative weight in such loans of floating interest rate instruments, indexed to short-term interest rates. Given the relatively low sensitivity of the demand for credit to changes in interest rates, the recent rise in the cost of credit is not yet expected significantly to affect credit trends.

In real terms, the current growth of financing extended to the non-financial private-sector is running at around 15 %, on a par with the rates recorded at the peak of the previous cycle (1989). Admittedly, there are reasons that may temporarily justify such high credit growth. But if these rates of increase are sustained over a

Deposit money institutions Balance sheet structure (a)

TABLE 5

% of average balance sheet

	Tota	ıl (b)	Commercial banks		Saving	s banks
	1998	1999	1998	1999	1998	1999
	JAN-SEP	JAN-SEP	JAN-SEP	JAN-SEP	JAN-SEP	JAN-SEP
ASSETS:						
Cash and central banks (c)	1.9	1.8	1.4	1.4	2.7	2.4
Interbank market assets (d)	25.7	20.2	31.8	24.3	15.0	14.1
Loans	46.7	50.2	42.4	45.8	53.9	56.9
Securities portfolio	18.8	19.8	17.6	20.1	21.7	20.0
Fixed-income	14.7	15.3	13.6	15.4	17.4	15.5
Equities	4.1	4.5	4.1	4.7	4.3	4.5
Other assets	6.9	8.0	6.8	8.4	6.7	6.7
LIABILITIES:						
Banco de España and						
interbank market (e)	29.8	27.2	40.3	37.0	11.6	12.1
Customer funds	55.1	56.3	44.1	45.2	74.5	73.6
Non-bank creditors (f)	53.4	54.1	42.7	43.4	72.0	70.6
Debt securities	1.7	2.2	1.4	1.9	2.5	2.9
Capital	5.8	5.6	5.3	5.0	6.4	6.4
Special funds	2.5	2.6	2.2	2.4	3.1	2.9
Subordinated financing	1.6	1.9	2.1	2.4	0.8	1.0
Other liabilities	5.2	6.4	6.1	7.9	3.6	4.0
OFF-BALANCE-SHEET IT	EMS:					
Contingent liabilities	9.6	11.4	12.2	15.0	4.3	5.0
Commitments and contingent risks	14.6	17.1	15.9	18.9	12.5	14.5
Futures transactions	148.3	139.9	213.9	198.6	33.0	47.5
MEMORADUM ITEM:						
Average total balance sheet						
Balance in EUR millions	894,390	936,947	573,331	579,859	292,002	325,139
Annual growth rate	8.5	4.8	8.3	1.1	8.8	11.3

Source: Banco de España.

(a) Data relate to the institutions existing in each period.

(c) Including cash, central banks (except securities purchases under repos) and Banco de España Certificates.

(e) Including Banco de España and credit institutions (time deposits and securities sales under repos).

(f) Including sales of securities to customers under repos.

prolonged period, they could, in addition to jeopardising macroeconomic stability, result in the future in a loss of quality for certain institutions' credit portfolios.

A second problem arising from strong growth of credit is the need for institutions to seek out the means of financing such credit. Should the growth of deposits prove insufficient, this may lead to balance-sheet mismatches. This aspect is discussed in detail in the following section.

Unlike in 1998, the share of the securities portfolio in the total balance sheet increased in the period of 1999 covered by this report (accounting for almost 20 %), as a result of the notable increase posted in the first two quarters.

Deposit money institutions continued to increase their investment in equities. But, moreover, they more than offset the fall in their holdings of government debt over the course of the year with most significant increases in the rest of their fixed-income (private and non-resident) portfolio. This probably reflects these institutions' wish to increase their share in national and international markets, especially in the euro area, and also, possibly, to hold more securities that may be used to obtain liquidity at the Banco de España. Thus, the holdings of bonds of the resident sectors, excluding general government and credit institutions, virtually quadrupled in the 12 months to September 1999, with a year-on-year increase of EUR 7,543 million. Judging by the activity on the primary market, purchases of mortgage securitisation bonds ac-

⁽b) Commercial banks, savings banks and credit co-operatives. The data relate to total turnover, which includes banks' foreign branches, but not subsidiaries.

⁽d) Including lending to banks (time deposits, securities purchases under repos and securities loans) and securities purchases under repos with the Banco de España.

TABLE 6

Operations with customers

		Year-c	n-year growth	n rates		% of	total
_	4000	1998		1999		1998	1999
	1998	Q4	Q1	Q2	Q3	JAN-SEP	JAN-SEP
Total loans (a)	13.7	13.4	12.2	12.4	13.4	100.0	100.0
Non-residents	25.0	8.4	-1.3	-10.5	-5.8	8.1	6.7
General government	-14.9	-16.3	-10.3	-6.8	-7.1	7.5	6.1
Other resident sectors Of which:	16.0	17.0	15.7	16.4	16.8	84.4	87.1
Mortgage loans	20.2	20.1	19.4	18.9	18.2	36.8	38.8
MEMORANDUM ITEM:							
Doubtful loans	-25.2	-23.7	-20.5	-18.2	-14.4	2.0	1.4
Variable interest rate loans	23.9	24.6	17.2	16.5	17.6	45.8	47.6
Loans in foreign currency (b) Loans + fixed-income portfolio of	18.3	4.2	-19.1	-20.8	-15.7	8.8	6.4
other resident sectors	15.8	17.3	16.7	17.7	18.7	85.1	88.9
Total loans to other							
resident sectors (c)	_	17.1	12.4	14.8	13.3	100.0	100.0
Other financial institutions	_	40.8	-66.9	-68.2	-58.4	3.1	1.4
Non-financial firms	_	13.5	11.7	16.4	14.4	47.0	47.0
Households and non-profit							
institutions serving households	_	19.2	19.1	17.7	16.6	49.9	51.7
Consumer	_	28.5	28.4	25.7	17.7	7.9	8.7
Housing	_	18.8	19.0	16.1	16.5	31.0	31.9
Other	_	14.0	12.9	16.4	16.2	11.0	11.1
MEMORANDUM ITEM:							
Up to one year	_	18.7	8.4	12.9	11.8	23.7	23.3
At over five years	_	20.6	19.6	19.8	16.6	57.1	59.7
Total non-bank creditors	6.5	5.0	5.4	6.2	6.6	100.0	100.0
Repos	4.2	-8.4	-10.0	-12.0	-17.5	20.8	17.0
Deposits	7.2	8.7	9.5	11.0	12.8	79.2	83.0
General government	9.6	12.8	22.9	18.1	14.2	3.0	3.3
Sight deposits	14.1	16.1	18.9	18.3	19.8	36.4	40.8
Time deposits	1.2	2.0	0.2	3.7	6.2	39.9	38.9
MEMORANDUM ITEM:							
Deposits with agreed maturity two							
years	-4.2	-7.2	-6.8	-4.9	-0.3	86.6	75.8
Deposits with agreed maturity > two							
years	13.8	34.0	67.4	90.7	132.2	13.4	24.2
Non-resident non-bank creditors	11.4	7.3	14.4	16.2	36.1	9.2	10.7
Creditors in foreign currency (b)	30.7	28.4	-8.7	-16.7	-5.3	6.8	5.8
Resident deposits in branches abroad	83.9	56.6	12.9	10.3	-24.3	6.0	5.5

Source: Banco de España.

counted for a significant portion of this increase. The portfolio of fixed-income securities of non-resident credit institutions and of other non-residents showed an increase on 12 months earlier of EUR 14,955 million (84 % at banks). These securities already accounted for 24 % of deposit money institutions' total fixed-income portfolio, although there were notable differences across institutional groupings. For banks, the non-resident fixed-income securities portfolio

represented one-third of the total, while for savings banks and credit co-operatives this figure was below 12 %, denoting a highly different degree of activity on international markets.

The item "cash and central banks" grew moderately, offsetting the decline, owing to redemption, in Banco de España certificates of deposit with an increase in assets at the Banco de España, the result of the higher level of re-

⁽a) Includes doubtful loans.

⁽b) To December 1998, loans/creditors in currencies other than the peseta. As from January 1999, loans/creditors in currencies other than the euro.

⁽c) Only businesses in Spain.

serve assets demanded by the new reserve requirement set by the Eurosystem. Lastly, other assets grew strongly further to the increase in other (non-interbank) accounts with credit institutions, associated with operating changes in interbank fund transfer procedures among countries, following the start of EMU. This effect tended to soften, being counterbalanced on the liabilities side by growth of a similar amount.

2.1.2. Structure of financing

The structure of deposit money institutions' financing was affected by various factors. On one hand, tax changes and the diminished attractiveness of mutual funds, against a background of low expected returns on financial markets, prompted a significant growth in deposits. On the other, there was the effect of the changes entailed by EMU (new monetary policy implementation framework, single interbank market for the euro area), the need to raise resources to finance the growth of credit, in a context of growing external indebtedness, and the need to resolve the problem posed by the shortage of assets to offer as collateral at ESCB monetary intervention tenders. All these circumstances led to a decline in the funds raised at the Banco de España and on interbank markets, to a greater weight of debt securities issues and subordinated financing and to a notable fall in repos (9).

Deposits grew especially at savings banks and credit co-operatives, but also at banks (7 %, in the first three quarters, at banks, and 15 % and 14 % at savings banks and credit co-operatives, respectively). Under this heading there was notable growth of 19 % in sight deposits (current and savings accounts) and a recovery in deposits with an agreed maturity, where there was a turnaround involving deposits at less than two years and deposits at over two years. The latter were particularly favoured by the recent personal income tax reform and, in a single year, saw their share in total time deposits increase from 13 % to 24 % (see Table 6). Overall, the growth of deposits was assisted by the lesser attractiveness of other investment instruments, such as shares in mutual funds (owing to the less favourable outlook on capital markets) and to the switch by the public to more liquid assets, given the low interest rates prevailing. The tax changes also favoured deposits to the detriment of mutual funds (see Box 2). For the first time, the capital gains arising on the sale of investment funds are now subject to a 20 % withholding, while the corresponding withholding on returns on deposits has been cut from 25 % to 18 %. In addition, returns on deposits generated over a period exceeding two years qualify for a 30 % reduction in the tax base, which was previously not the case.

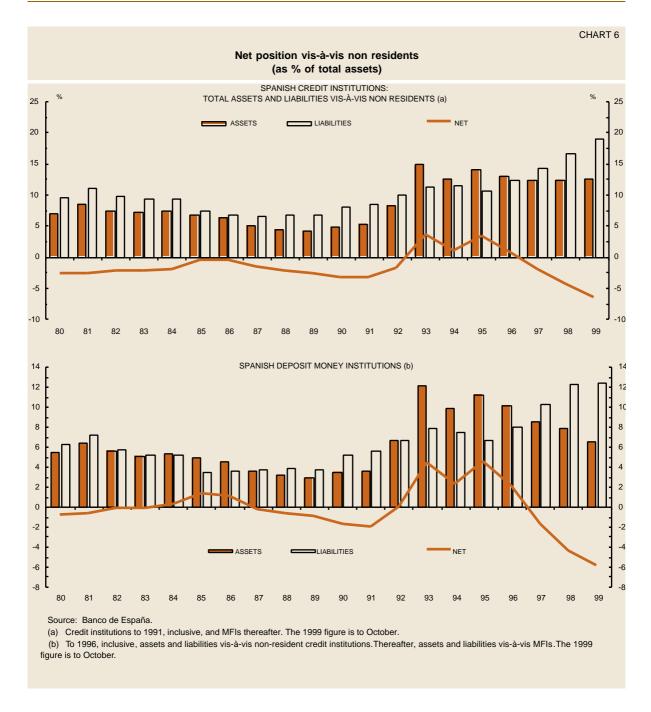
With regard to the cost of this source of financing, the interest rates on new deposit operations touched bottom in the third quarter of the year, rising slightly thereafter. As in the case of lending interest rates, the rises were sharper and swifter on longer-dated deposits, particularly on deposits at over two years.

The strong growth of non-resident non-bank creditors and the tailing off of the process of cross-border deposit delocation were also noteworthy. In the period from January to September 1999, residents' deposits in Spanish bank branches abroad fell slightly, in contrast to their sharp growth in previous years (in 1998, 53 % of the change in resident creditors materialised in branches abroad). The remuneration of the reserve requirement and the lesser relative significance of the associated tax benefits, in a context such as the present one in which interest rates are very low, would account for this fact.

Despite the pick-up in deposits, the notable fall in asset repos (-18 %) meant that resources raised from customers grew but moderately (at around 6 %). The fall in repos was due to fewer issues of government debt, the main instrument used in such repos, to the decline in the demand for repos by mutual funds and to the need for deposit money institutions to hold securities not assigned under repurchase agreements for use as collateral at the Eurosystem liquidity tenders. In past years, banks had been in a situation in which the volume of portfolio securities susceptible to use as collateral was limited. This was due to the fact that the bulk of such instruments had been assigned under repurchase agreements either to the public or to other financial institutions. That had generated certain pressures on money markets, especially in periods in which a high volume of couponwashing operations were taking place, reducing even further the volume of assets available. To the end of the third quarter, banks increased their holdings of private fixed-income securities and of fixed-income paper issued by non-residents (10), offsetting the fall in the stock of Ban-

⁽⁹⁾ In overall terms, the fall in interbank liabilities could again be attributed to the effect of mergers and the diminished activity of foreign branches.

⁽¹⁰⁾ In recent years, the Banco de España has progressively extended the set of assets acceptable as collateral at monetary intervention tenders to include private fixed-income and also equities. Under the new framework adopted by the ESCB, assets issued by non-residents, included in the "Tier 1" and "Tier 2" assets of the corresponding central banks, may also be used as collateral at the Banco de España.



co de España certificates and of government debt, and reduced repos to the public. Both factors were conducive to an easing of the shortage of securities besetting institutions. Nonetheless, the new system of ESCB monetary intervention tenders has given rise to fresh needs for institutions in respect of available securities.

Although the securitisation of loans enabled the growth of credit on the balance sheet to be reduced, customers' resources continued to prove insufficient to finance the expansion of credit. In the 12 months from September 1998 to September 1999, the main source of resources for savings banks and credit co-operatives lay in their non-bank creditors (66 % and 64 % of the total (11), respectively), while for banks these covered only 23 % of their financing requirements. For banks, the main source of financing was the interbank market (44 %). However, securities issues were relatively significant as an alternative to the interbank market. Securities issues accounted for almost 23 % of banks' total resources and for 13 % of those of savings banks, notably up on previous

⁽¹¹⁾ Defined as the change in total liabilities minus interbank assets.

periods. Moreover, a significant portion of the growth of non-resident non-bank creditors (most important at banks) corresponded to resources raised via international issues by non-bank subsidiaries domiciled in tax havens. As a result, parent bank figures would be understating the total resort to the capital markets.

Net resort to the interbank market, essentially with non-resident banks, remained important. However, one substantial difference from previous periods was that this did not lead to an increase in interbank liabilities with non-residents, but to a fall in assets. On the liabilities side, deposit money institutions raised the resources they ceased to receive from the Banco de España on the euro-area single money market, while they reduced interbank financing from outside the euro area.

Chart 6 depicts the growth of Spanish deposit money institutions' foreign interbank liabilities, which rose to over 12 % of the total balance sheet in 1998. Such a high level may perhaps explain why banks sought in 1999 to reduce their interbank assets instead of raising their liabilities further. In any event, in net terms, Spanish money deposit institutions' foreign interbank position stood at an historical high. The creation of a single interbank market in the euro area has provided for readier financing of Spanish banks abroad and lessened the significance of the overall net external position. That said, certain risks have persisted. These arise, firstly, from the fact that financing in the euro interbank market is not fully comparable, in terms of liquidity risks, to financing from the Banco de España; and secondly, because the bulk of Spanish banks' net external debit position continues to be with institutions outside the euro area.

Finally, it should be mentioned that capital and reserves scarcely grew, though subordinated financing did. In consolidated terms and with data to June 1999, the BIS ratio (12) for deposit money institutions as a whole stood at 11 %, significantly above the minimum required level (8 %). With regard to capital requirements, a consultative document was published in June this year by the Basel Committee on Banking Supervision proposing an amendment of the 1988 Accord (see Box 3).

2.1.3. Income and costs

In the first three quarters of 1999, and compared with the same period a year earlier, the

operating margins of money deposit institutions continued to narrow, despite which profit before tax continued to grow (see Table 7). Once again, this was due to the performance of the items under net income. Specifically, total writedowns fell by 30 % (11 basis points in terms of ATA) as a result, essentially, of the lesser need for provisioning on securities and for countryrisk provisioning. Both were relatively high in the first three quarters of 1998 owing to the Russian debt crisis and its repercussions on international stock exchanges and markets.

All three margins (net interest margin, gross margin and net margin) above the profit-before-tax item fell by approximately 10 basis points. Profit before tax, however, grew from 0.98 % of ATA to 0.99 %, whereby the pre-tax return on equity once more grew, rising from 17.1 % to 17.6 %.

The fall in net interest, as a percentage of ATA, was due above all to the continuing narrowing of spreads on lending-deposit operations in pesetas. Although the spread between lending and deposit rates on new credit and deposit operations in pesetas held relatively stable from early 1998 onwards (see Chart 7), margins still continued to fall in terms of return and average cost. This is due to the longer average maturity on loans compared with on deposits and, therefore, to the greater time elapsing before lending - as opposed to deposit - interest rates are updated. The lending-deposit spread on new operations stabilised at around 3 %; thus, unless there was a rise, there would still be room for downward movement in the average return-average cost spread (which reflects all operations outstanding), which stood at 3.5 %.

Commissions relating to the commercialisation of financial products (mutual funds in particular) and overall commissions in general continued to grow considerably (12 %). In the case of the former, however, such growth was clearly below that of the previous years. This was due to the much less expansionary course of mutual funds (see related section). The growth of commissions was checked by lower income on financial operations, as a result of which the gross income margin diminished as a percentage of ATA. Notable under income on financial operations was the negative income (of the order of EUR 500 million) arising on the trading portfolio, in contrast to the positive result of EUR 644 million in the first three quarters of 1998.

Operating expenses grew moderately (2.8 %), but above gross income. Accordingly, the overall efficiency ratio (operating expenses/gross income) worsened by more than one

⁽¹²⁾ Own funds as a percentage of risk-weighted assets; the minimum percentage required is $8\,\%$.

BOX 3

Proposals for reform of the Basel Accord on the capital requirements for credit institutions

Last June, the Basel Committee on Banking Supervision (BCBS) published an important consultative document containing various proposals for a new scheme of capital requirements for credit institutions and groups of credit institutions, applicable at the international level, to replace the one currently in force under the 1988 Basel Accord, as subsequently amended (1). The objective of the document is to canvass the opinions of the various sectors involved. These would then serve as the basis for the preparation of definitive proposals in the year 2000, leading to the eventual signing of a new international accord. Accordingly, the proposals are not closed, but rather very much open, with the details of many points still to be elaborated.

The 1988 Basel Accord is the basis for the current legislation on the minimum capital of credit institutions not only in the signatory countries (G 10) but also in many other countries, including those of the European Union and, therefore, Spain, so that its amendment in the near future is a matter of great importance. The purpose of the reform is, while maintaining the positive aspects (the achievement of higher levels of capitalisation of national and international financial systems, the establishment of uniform international rules), to reform those aspects that have been most problematic. These relate, above all, to the inability of the original risk classification system to discriminate adequately according to the true credit risk of each asset, which gives rise to certain perverse effects.

It should be noted, for example, that all credit risks with non-banking firms are assigned a coefficient of 100 % (2), irrespective of the firm's credit quality. This means that loans to firms with a high credit quality are subject to the same capital requirement as loans to firms of doubtful credit quality. At the same time, loans to OECD governments, by the mere fact of OECD membership, are subject to a 0 % coefficient, although the credit ratings of the OECD member countries vary considerably. The situation regarding the requirements for interbank loans is similar. These depend on whether the borrower bank is domiciled in an OECD country. These inconsistencies have resulted in the growing use by banks of regulatory arbitrage operations. For example, loans to higher-credit-quality firms, where the real risk does not correspond to the regulatory capital requirements, are securitised and only the loans with the lowest credit quality within each grouping are kept on the balance sheet. Moreover, it is argued that the current coefficients, by favouring short-term interbank loans over long-term loans, encouraged the high short-term foreign indebtedness of the banks of the Asian countries afflicted by the 1997 crisis, this being considered one of the factors contributing to the Asian crisis.

The proposed new scheme of capital requirements of the BCBS is based on three pillars:

- a) the existence of certain minimum capital requirements;
- b) supervision of the internal risk control mechanisms of the institutions;
- c) a strengthening of market discipline.

As regards the minimum capital requirements for credit risk, three alternatives are proposed, according to the degree of development of the risk control mechanisms of each institution. In general, the BCBS proposes replacing the current scheme, based on the distinction between OECD and non-OECD countries, by a scheme based, to a greater extent, on the credit ratings assigned by rating agencies (such as Standard & Poors, Moody's and Fitch Ibca) to countries and firms (external rating). Alternatively, those institutions which demonstrate sufficient capacity for the purpose would be able to use a system based on their own credit ratings of counterparties (internal rating). Finally, the possibility is anticipated of institutions being able, in future, to use formal credit risk models to calculate their minimum capital requirements. This is not considered feasible in the short term, given the problems that still exist for the assessment of such models.

Changing to a system based on counterparties' credit ratings would certainly help to strengthen the tie between the capital requirements and true credit risk of the institutions, but would not be without problems. A first and obvious problem would be the reliability of the credit ratings and their implications in cases of sudden losses of confidence. For example, the rating agencies have been widely criticised for their inability to anticipate the problems of the Asian countries afflicted by the 1997 crisis and for their over-reaction once the crisis had begun. Against this background, to link the capital requirements of credit institutions to credit ratings could make the system even more unstable. Also, the existence of credit ratings is limited, above all, to large mainly US firms. This raises the problem of what to do about unrated firms. The proposal of the BCBS (which applies a coefficient of 100 % to unrated firms and of 150 % to firms with a low credit rating, may give rise to perverse effects on the bond market and on the incentives facing rating agencies. In any event, given all its problems, the need to change the current system is manifest, so that progress along the lines indicated by the BCBS is necessary.

A more refined measurement of credit risk must be accompanied by the consideration of other risks previously considered implicitly along with the credit risk. It is intended that the reform of the 1988 Accord should not result in an undue decline in the capitalisation of banks, with negative consequences for financial stability. The BCBS therefore proposes that the institutions should be subject not only, as at present, to the minimum capital requirements for credit and market risk, but also to capital requirements for interest rate risk in the banking book, when this is significantly higher than average, as well as for operational risks. The BCBS's June document makes proposals in this respect that are even more tentative.

In any case, irrespective of the degree of success in establishing minimum capital requirements that are truly linked to the real risk of the institutions, the growing complexity of the institution's operations makes it necessary to supplement these measures with what the BCBS calls the second and third pillars. That means promoting both internal and external risk controls, deriving from the market itself. From the viewpoint of internal control of the institutions, the supervisors should require each institution to have an internal risk-control system, supervise its operation and take effective action in the event of risk situations, with the power to require levels of capital above the minimum in the event that the situation of the institution so requires. Finally, market discipline may also play an important role in the promotion of a stable and solvent financial system, for which purpose the BCBS stresses the need to improve the transparency of the institutions. To this end, certain general binding principles could be established.

^{(1) &}quot;A new capital adequacy framework", Basel Committee on Banking Supervision (June 1999).

⁽²⁾ This means that the general requirement to maintain a minimum volume of capital equivalent to 8 % of risk positions is fully applied. When the coefficient is 20 %, for example, a volume of capital equivalent to 1.6 % (20 % * 8 %) of the risk exposure is required.

TABLE 7

Deposit money institutions

Structure of the profit and loss account

% of average balance sheet

	Total		Commer	Commercial banks		Savings banks		
	1998	1999	1998	1999	1998	1999		
	JAN-SEP	JAN-SEP	JAN-SEP	JAN-SEP	JAN-SEP	JAN-SEP		
(+) Interest income	5.80	4.72	5.71	4.64	5.93	4.81		
(-) Interest expenses	3.50	2.51	3.82	2.84	2.96	2.02		
Net interest income	2.30	2.21	1.90	1.80	2.96	2.79		
(+) Net commissions(+) Income on financial	0.66	0.70	0.67	0.74	0.63	0.64		
operations	0.14	0.07	0.14	0.06	0.16	0.09		
Gross income	3.10	2.98	2.71	2.61	3.75	3.52		
(-) Operating expenses	1.99	1.95	1.74	1.73	2.39	2.27		
Net income	1.12	1.03	0.96	0.88	1.36	1.25		
(-) Write-downs and privisions	0.36	0.25	0.35	0.19	0.41	0.35		
(+) Other income	0.23	0.21	0.19	0.15	0.31	0.32		
Profit before tax	0.98	0.99	0.81	0.83	1.26	1.22		
MEMORANDUM ITEM:								
Average total assets (EUR m)	894.390	936.947	573.331	579.859	292.002	325.139		
Growth rates:								
Total assets	8.5	4.8	8.3	1.1	8.8	11.3		
Net interest income	5.2	0.5	9.5	-3.6	0.8	4.9		
Gross income	5.6	0.7	6.7	-2.3	4.4	4.4		
Net income	8.4	-3.0	15.3	-7.6	1.5	2.1		
Profit before tax	11.8	6.3	12.7	4.8	11.3	7.8		
Profit before tax								

percentage point, shifting from 64 % to 65.3 %. This deterioration occurred at all groups of institutions, except credit co-operatives. The divergence between operating expenses at banks and at savings banks also persisted. While savings banks continued to pursue their policy of expansion, banks were applying a staff restructuring policy, meaning that the growth of their operating expenses was very low. Nonetheless, the higher growth of ATA at savings banks meant that operating expenses as a proportion of ATA were falling to a greater extent at savings banks than at banks.

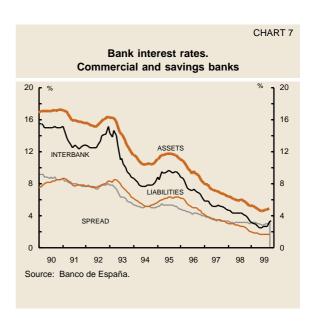
As a result of the foregoing, the net income of deposit money institutions as a whole fell 3 % in the first three quarters of 1999, compared with growth of 8.4 % in the same period in 1998. The sizeable fall in loan and securities write-downs, together with income arising on securities and property sales (accounting for 18 % of profit before tax) and other results meant profits continued growing in 1999, albeit at a lower rate than in 1998.

However, loan write-downs were now standing at very low levels. Moreover, given the maturity of mutual-fund business, such strong growth in commissions as that observed in the recent past would not be foreseeable, and income relating to financial operations was characterised by its erraticism. Consequently, it was likely that banks would not be able in the future to offset fresh reductions in the spread between lending and deposit operations with customers with the foregoing factors, as they had done in the past. That said, they could make use of the strong, unrealised capital gains built up in their portfolios (which accounted for 3.3 % of total ATA)). But, in any event, the offsetting of a potential narrowing in the net interest margin should reside increasingly on the control of operating expenses.

Admittedly, the reduction in write-downs on the credit portfolio was partly due to institutions' improved procedures for monitoring credit risks. But it likewise reflected the strong anti-cyclical character of the default rate and the existence of a regulation on provisions for loan losses requiring that institutions should make provision only as and when debtors incurred delays in respect of their payment obligations. Generally, in the developed countries, credit institutions' provisions for loan losses show a much more stable time profile than in the Spanish case and, at present, a higher level of provisioning. In this respect, the Banco de España recently (13) approved an amendment to Accounting Circular 4/1991. Specifically, it addresses the setting up of a fund for the statistical coverage of loan losses. The aim of the new regulation is that institutions should set aside provisions during periods of buoyant economic activity, in which the cost of provisioning is lower owing to the existence of higher profits, and to which they may resort in periods in which the default rate rises and profits are lower.

2.2. Other financial intermediaries

This section analyses recent developments at the so-called institutional investors, i.e. mutual funds, pension funds and insurance companies (14). The weight of this group of institutions in the financial system has progressively increased as a result of very strong growth in recent years, especially in the case of mutual funds. The growth of this type of financial intermediary is playing, and will continue to play in the future, a pivotal role in the development of Spanish capital markets. The high volume of assets they manage means they are key players in such markets. Moreover, they contribute to increasing the range of investment opportunities for the public in general. In this connection, various measures have been introduced in recent months. These are aimed at providing for the development of new vehicles, such as funds of funds and subordinate and principal funds; at adding flexibility to investment opportunities and to the workings of mutual funds investing in government securities and of real-estate portfolio investment institutions; at adapting the regulations governing venture capital companies; and at improving investor-information procedures.



2.2.1. Mutual funds

In terms of collective investment, mutual funds are the most developed segment in the Spanish economy. Indeed, they have reached a significant degree of maturity. The net asset value managed by mutual funds in the first quarter of 1999 amounted to 41 % of GDP, compared with 68 % in the United States or 22 % in the United Kingdom, according to data from the European Federation of Collective Investment Institutions. Other European countries such as Italy or France, in which mutual funds have also grown strongly in recent years, stand at a similar level to Spain, while in Germany or Japan, mutual funds are much more under-developed (less than 10 % of GDP). In relation to bank liabilities, the net asset value of mutual funds in Spain as of September 1999 accounted for almost 40 % of deposit money institutions' total non-bank creditors.

On provisional INVERCO data for September 1999, the net asset value of mutual funds (FIAMMs and FIMs) had grown by only EUR 1.5 billion in the first three quarters of the year. This was the result of a decline of EUR 6.3 billion in FIAMMs and an increase of EUR 7.8 billion in FIMs. This signified a very small increase in the net asset value of mutual funds, after several years' strong and continuous growth (up EUR 41 billion in 1998 and 50 billion in 1997). Indeed, in the third quarter of the year, the net asset value had even fallen (see Chart 8). As regards the other collective investment institutions, the information available from the **CNMV** (Spanish National Securities Market Commission) for June 1999 highlighted the continuing strong growth rates of the net asset value of open-end investment companies (SIM-CAV by their Spanish name) and of real-estate

⁽¹³⁾ At the meeting of its Governing Council on December 17th 1999.

⁽¹⁴⁾ Other financial intermediaries such as securitiesdealer companies and agency brokers are not considered in this paper since, by virtue of the nature of their activity, the volume of their financial assets and liabilities accounts for less than 1 % of the financial sector's (credit institutions and insurance companies) total financial assets and liabilities.

mutual funds (FIIs), albeit from very low starting points. Conversely, the expansion of the business volume in Spain of foreign collective investment institutions moderated considerably in the first half of the year. Overall, closed-end investment companies (SIMs), SIMCAVs, FIIs and foreign collective investment institutions accounted, in June, for 7 % of the total net asset value of FIMs and FIAMMs.

The scant growth of mutual funds may be attributed both to the small volume of net subscriptions and to the decline in capital gains arising on valuation changes. Several factors contributed to detracting from the attractiveness of investment in mutual funds and in domestic financial instruments in general. These were, namely: the low level of short-term interest rates; the expectations, first, and the realisation, subsequently, of capital losses on fixed-income funds, as a result of the rise in long-term interest rates; and the erraticism of Spanish share prices during the course of the year. Further, as earlier indicated, the onset of 1999 saw a change in the tax arrangements for mutual funds. While not ceasing to be favourable to these funds, the arrangements did make them somewhat less competitive compared with other alternative investments such as deposits or insurance. As a result, and drawing on CNMV data, the volume of net subscriptions to mutual funds fell to EUR 6.7 billion in the first two quarters of 1999 compared with the figure of over EUR 28 billion for the previous year. And, on provisional figures, the volume turned negative in the third quarter. After several years' strong growth, the fall in the volume of net subscriptions is consistent with the degree of maturity attained by the mutual funds sector in the Spanish economy.

As was the case in 1998, the low levels of interest rates on short-term investments and public debt drove investors to demand (and fund managers to offer) funds with a slightly higher risk profile in exchange for correspondingly higher expected returns. Accordingly, there continued to be a net withdrawal of shareholders from FIAMMs throughout this period, while the number of shareholders in FIMs increased. Although the current situation of the equity and long-term bond markets may lead mutual fund shareholders to adopt a somewhat more conservative attitude, a return to the fund structure of some years back -when very shortdated investments in domestic public debt predominated- is not expected. The present structure, which is much more diversified in terms of maturities and risks, is not only more consistent with a medium-term time horizon, typical of fund investors, and with the growth of domestic and euro-area capital markets; it is, moreover, in

line with developments on the other European markets.

In the first two quarters of the year, on CNMV data, a notable 42 % of net subscriptions captured by FIMs were for funds described as international according to the new CNMV classification (15). Overall, these funds already accounted in June for 12 % of the total net asset value of FIMs (9.1 % in December 1998). Furthermore, grouping together the types of funds defined by the CNMV on the basis of whether they are pure fixed-income, mixed, pure equity or guaranteed, the bulk of the new resources raised by the funds were invested in mixed funds (72 %), with 20 % routed into pure equity funds and less than 5 % into pure fixed-income funds and guaranteed funds alike (due in this latter case to the decline in fixed-income guaranteed funds). However, in terms of cumulative net asset value as of June 1999, pure fixed-income funds, mixed funds and guaranteed funds each accounted for approximately 30 % of the total net asset value, with the remaining 10 % represented by pure equity funds (8.7 % in December 1998).

Turning to FIAMMs, there was, as is discussed elsewhere in this report, a shift towards international instruments. But this phenomenon was centred on the euro area which, for portfolio risk purposes, is currently on an equal footing with domestic investments. The group of FIAMMs investing more than 5 % of their portfolio in assets not denominated in euros accounted for only 0.3 % of the total net asset value of FIAMMs as of June 1999.

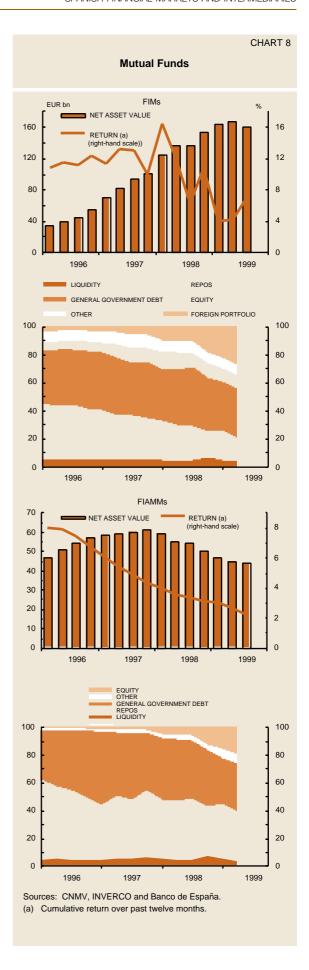
With regard to the breakdown of funds by financial group (banks, savings banks, etc.), there were no significant differences from one group to another in the first two quarters of the year. Consequently, banks retained the leading position in mutual fund-related business, with 63 % of the total net asset value of FIMs and FIAMMs as of June 1999, with savings banks (29 %) following. The possibility of major future growth in unit-linked funds leading to greater participation of insurance companies in the management of mutual funds is limited by the fact that a majority of the insurance companies that offer unit-linked funds are subsidiaries of deposit money institutions. As a result, the management of these funds tends to be entrusted to the corresponding fund manager of

⁽¹⁵⁾ Fixed-income or mixed fixed-income funds with a volume of assets in currencies other than the euro of over 5 %, equity funds or mixed equity funds with a volume of assets in currencies other than the euro of over 30 % and global funds, i.e. those with no defined investment policy and which, therefore, may invest in any market.

the banking group. International fund managers, who might gain in prominence as a consequence of the demand by shareholders for portfolios that are more diversified internationally, are faced with the problem of competing with the distribution network of national deposit money institutions.

Analysis of the assets in which FIMs and FIAMMs invest the funds raised from shareholders reveal, logically, that these are greatly influenced by the relative performance of the different types of funds. Hence, in recent years, there has been a progressive increase in assets with a higher level of risk and return and in international assets. The process of internationalisation has quickened significantly since the last quarter of 1998 and during the first two quarters of 1999 (see Chart 8). This process is closely connected with the start of EMU. Thus, of the 26.4 % of the total net asset value of FIMs accounted for by the foreign portfolio as of June 1999, 74 % related to euro-denominated instruments. The process was also intense in FIAMMs. Whereas the foreign portfolio accounted for only 1.6 % in December 1997, by June 1999 this figure stood at 19.6 % of the total net asset value (93 % of which in euros). Foreign instruments in euros virtually doubled in the period from January to June in 1999, in FIMs and FIAMMs alike; on the contrary, foreign instruments in currencies other than the euro fell over the same period as a result of an increase in equity and a decrease in fixed income from outside the euro area. This strong rise in assets in the euro area shows Spanish fund managers have adapted rapidly to the risk diversification possibilities offered by EMU (e.g. in equity or in private fixed income) but, above all, it highlights the shortage of negotiable securities on domestic markets. For FIAMMs, for instance, the negative net issues of Treasury bills made it necessary to seek out alternative low-risk short-term assets in which to invest. EMU has offered them the possibility of investing in other countries' short-term government debt securities, free from exchange risk, thereby explaining the strong growth of their foreign assets in euros.

Also notable in connection with the performance of FIMs' portfolio at net realisable value in the first half of the year was the moderate growth of domestic equity (dipping from 10.1 % of the total net asset value in December 1998 to 9.4 % in June 1999). This was in comparison with foreign equity instruments from the euro area and from outside the euro area, which increased by three points as a percentage of net asset value (from 5.6 % to 8.6 %), and the highly significant growth of short-term private fixed-



income instruments, the result of the renewed vigour of the domestic market for commercial paper. Conversely, repos continued to decline in absolute terms, as did Treasury bills and long-term private fixed-income instruments. In FIAMMs, repos and government debt also fell and private fixed-income instruments grew.

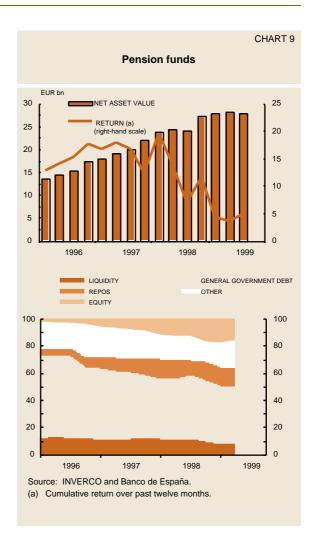
2.2.2. Pension funds

In December 1998, the net asset value of pension funds accounted for 5.7 % of Spanish GDP, far below the related figure for mutual funds. This underscores the fact that their development in Spain has been much slower than that of mutual funds. Although their level is comparable with that of most of the major European countries such as Germany, France or Italy, it is far below that of countries such as United States, United Kingdom or Netherlands, where the related percentage exceeds 70 % (INTERSEC data).

On provisional INVERCO data to September, the growth rate of pension funds also fell in 1999. However, they did so to a lesser extent than mutual funds. In the first nine months of 1999, the net asset value of pension funds increased by EUR 837 million, somewhat less than half the growth recorded in the same period in 1998 (EUR 2,196 million), but somewhat over half the growth of the net asset value of mutual funds in the same period.

Gross (net) contributions in the aforementioned period, estimated drawing on a representative sample of 85 % of total net asset value, amounted to EUR 2,950 (1,010) million. Although there is no comparable information for 1998, comparing the year-on-year growth rate of net asset value (which includes net contributions plus revaluation) with the cumulative return over the past twelve months allows the course of net contributions to be approximated. Under this hypothesis, contributions to pension funds in the first three quarters of 1999 would have fallen slightly, with the heavy decline in returns most accounting for the lower growth of net asset value (see Chart 9). In any event, a considerable portion of contributions to pension funds is concentrated in the final quarter of each year, as a result of which the other quarters may not be sufficiently significant.

With a view to the future, the prospects for pension funds growth remain favourable. In addition to demographic factors and the growth in disposable income to invest, as a consequence of the growth of national per capita income, the recent publication in the BOE (Official State Gazette) of the regulation on the mandatory



"externalisation" of companies' pension commitments to their employees (the transfer of inhouse provisions to an external pension fund or insurance company) should be conducive to the continuing growth of employee schemes in the future.

The breakdown of the portfolio of pension funds was along similar lines to that of FIMs. The share of both equity and foreign instruments increased at the expense of government debt, albeit less markedly so than at FIMs (see Chart 9). One particular contrast was discernible in the fact that the relative growth of the foreign portfolio slowed, according to the data available and unlike in mutual funds, in the period under analysis after having run very high in 1998. Foreign assets thus moved from accounting for 16.7 % of the total net asset value in December 1998 to 16 % in June 1999, with a slight decline in the fixed-income foreign portfolio and a marginal increase in the equity foreign portfolio. This was consistent with the developments observed in FIMs' portfolio in currencies other than the euro. Accordingly, it appears that the difference might have been due to the be-

Insurance companies (a)								
	1995	1996	1997	1998				
INDICATORS OF ACTIVITY (b):								
Premiums written	1,9	12,1	8,5	8,2				
Life	-4,2	20,9	16,8	7,7				
Non-life	6,7	6,0	2,0	8,7				
Technical reserves	18,3	18,2	17,3	15,2				
Actuarial reserves	22,5	23,1	21,8	17,1				
Other reserves	9,5	6,4	5,0	9,0				
Net investments	24,8	19,1	18,2	12,3				
STRUCTURE OF GROSS INVESTMENTS	S (c):							
Tangible invesments	9,2	7,9	7,1	6,3				
Loans and credits	2,6	2,1	1,6	1,8				
Equity portfolio	5,7	5,4	5,3	5,9				
In related companies (d)	3,3	3,5	3,1	2,9				
Other equity	2,4	1,9	2,2	3,0				
Fixed-income portfolio (e)	57,7	51,2	51,9	56,3				
Deposits (f)	2,6	3,6	4,1	9,7				
Indexed securities (g)	_	_	_	0,6				
Shares in mutual funds (g)	_	_	_	5,2				
Other financial investments	22,2	29,7	30,1	11,2				
Investments for the account of policyholders (h)	_	_	_	2,9				

Sources: Dirección General de Seguros and Banco de España.

(a) To 1997, rates and ratios refer to the business in Spain of public limited companies, mutual insurance companies and foreign branches; in 1998, to the total business of public limited companies and mutual insurance companies.

(b) Annual % growth rates.

c) As % of total.

(d) Shares in group and associated companies.

(e) To 1997, included only long-term securities. Short-term securities (Treasury bills) appeared under other financial investments.

(a) Items previously included under other financial investments.

(h) Insurance in which the policy-holder assumes the investment risk (unit-linked funds).

haviour of the foreign portfolio in euros. In pension funds, the lesser volume of funds in absolute terms and the greater liberty to invest in whatsoever instruments lessened the problem of the shortage of negotiable instruments and, therefore, alleviated the need to resort to other fixed-income markets in the euro area.

2.2.3. Insurance companies

The volume of premiums issued by insurance companies has, as a percentage of GDP, grown continuously in recent years. Life assurance has contributed most significantly to this, with mixed products combining insurance elements with saving aspects and, therefore, competing directly with other financial intermediaries. The prospects are for such growth to continue in the future. On EUROSTAT data, the volume of Spanish insurers' premiums accounted for 5.4 % of GDP in 1997, while the related figures for United Kingdom, France, Germany and Italy were 11.7 %, 9.9 %, 6.4 % and 4.2 %,

respectively. Specifically, Spain stood above Italy but below the other three countries.

Various events have arisen over recent months that might prove favourable to the insurance business. First, in the tax domain, the personal income tax reforms in place since the onset of 1999 have entailed certain benefits for saving products linked to life assurance (see Box 2). In this same area, the treatment for tax purposes of insurance policies invested in unitlinked funds and whose risk is assumed by the policy-holder has been clarified. Such instruments are considered, under certain conditions, as insurance products and are entitled, therefore, to the related tax benefits and to the possibility of switching funds at no tax cost. Finally, the recent approval of the above-mentioned regulation on the "externalisation" of companies' pension commitments is a further factor that may be conducive to group life assurance policies being taken out.

The short-term economic information on insurance usually appears with some delay. The latest official DGS (Directorate General for Insurance) data are for year-end 1998. Table 8 shows some of the most relevant aspects of activity in this sector. In any event, it should be mentioned that 1998 saw a change in the chart of accounts for insurance companies, along with changes in the scope of the DGS statistics. Consequently, comparisons with previous years occasionally prove difficult.

Taking the total insurance activity of public limited companies and mutual insurers in both Spain and abroad, the volume of premiums issued was EUR 25,651 million in 1998. Of this amount, EUR 12,164 million related to the life sector and EUR 13,488 million to non-life insurance. This volume of premiums signified yearon-year growth of 8.2 %, similar to that in 1997. However, unlike what had happened in previous years, growth was distributed almost evenly between life and non-life business. That meant lower growth in life business and, consequently, in the mathematical provisions and in the stock of investments by insurance companies (see Table 8). In any event, such investments amounted to more than EUR 63 billion, a higher volume than that of FIAMMs and over twice the net asset value of pension funds.

The lower growth of life assurance in 1998 might have been due to the uncertainty surrounding its future tax treatment and to the lesser attractiveness of mixed saving-insurance products, as a result of low interest rates. Some of this uncertainty may have run into the first half of the current year. Nonetheless, in the third quarter there was a very significant pick-up further to which, according to employers' association data for bancassurance firms, premiums issued by their associates (comprising around 60 % of total life business) grew 22 % over the course of the first nine months of the year in relation to the same period a year earlier.

Regarding the breakdown of insurance companies' investment portfolio, the change in the chart of accounts entailed a break in many of the items from 1998 onwards (see Table 8). However, of note were the continuing fall in the relative weight of tangible investments, the growth of the equity portfolio and the relevance acquired by shares in mutual funds (5.2 % of the total) and the growth of investment on behalf of policy-holders. Included under this latter category are investments in unit-linked funds (2.9 % of the total).

22.12.1999.

ANNEX 1

COMPARISON OF THE DEVELOPMENT OF BANKS AND SAVINGS BANKS

The purpose of this annex is to analyse briefly the main differences in the recent development of the two main groups of credit institution in Spain (banks and savings banks). A comparison is made of the changes in the structure and main headings of their balance sheets and in the main components of their profit and loss accounts between 1995 and the third guarter of 1999 (the latest period for which data is available). Broadly, it can be stated that during this period the differences in the productive specialisation of banks and savings banks have not been reduced appreciably, with the latter concentrating relatively more on retail activity. This specialisation is the main factor explaining most of the differences that are discussed in more detail below.

Structure of the balance sheet and its main components

As can be seen in Chart A1, between 1995 and 1998 the total balance sheets of the banks and savings banks, in terms of GDP, grew similarly, with the larger relative size of the former clearly maintained. In 1999, however, while the total balance sheet of the savings banks rose slightly, that of the banks fell by almost four percentage points. The reasons for this fall have already been discussed in detail in the main body of the text.

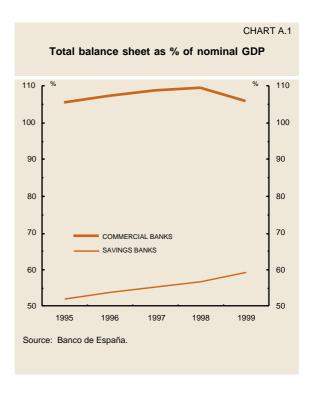
As regards balance-sheet structure, the main differences between these two groups have traditionally consisted in savings banks' greater specialisation in retail business, with a predominance of loan/deposit activity as against interbank- and wholesale-market intermediation. As a result, the relative weight of loans is much lower in the banks' balance sheet, currently standing at an average of slightly more than 40 % of total assets while in savings banks it exceeds 56 %. Also, the higher relative weight of customer deposits in the balance sheet of savings banks is notable (above 70 % of total liabilities, as against more than 45 % in the case of banks).

During the period analysed, the differences in the structure of the business of these institutions have only been reduced in relative terms, with a certain increase in the weight of the lending and deposit activity of banks, at the expense of interbank balances. The savings banks, meanwhile, have recorded a continuous

increase in the weight of interbank financing, as a consequence of the low growth in their deposits relative to their lending. It should be stressed that the growth in the total lending of savings banks clearly exceeded that of banks in the period analysed. The latter grew at annual rates of around 10 %, and the former at rates between 10 and 17 %.

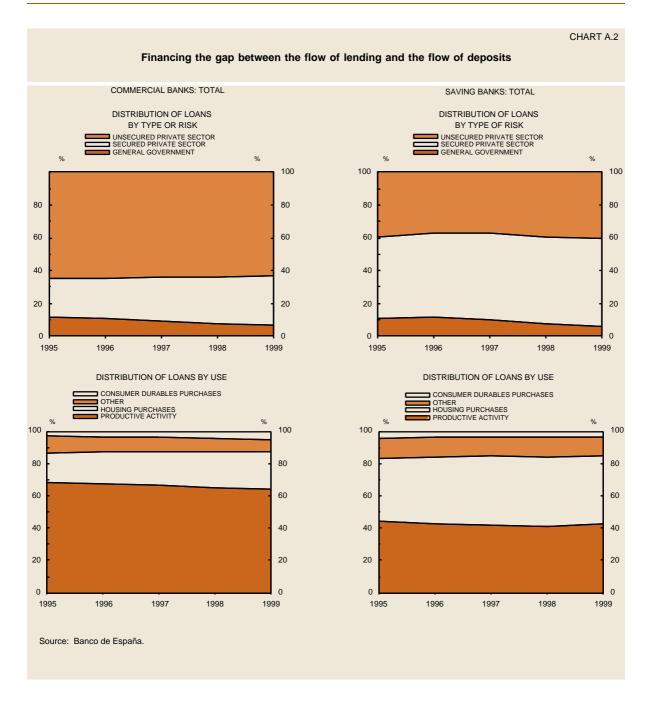
As can be seen in Chart A2, this strong growth in lending has only given rise to a relative reduction in the differences between the banks and savings banks in relation to the distribution of lending both in terms of risk type and purpose. Despite the significant growth in banks' secured lending and housing loans, loans to finance productive activities and unsecured lending continued to be the main components of their lending. In the case of savings banks, there was also a relative increase in unsecured lending and loans to finance productive activities, although they did not reach the same relative weights as secured lending and housing loans. The strong growth in savings banks' lending to non-residents, at rates of more than 30 % during the period, is notable. This reflects the progressive internationalisation of the activity of these institutions. However, the importance of lending to non-residents by savings banks, at around 1 % of the total balance sheet, is still well below the weight of such lending by banks, at almost 5 % of the total balance sheet.

As already mentioned in the main text, the strong growth rates recorded for lending were not matched by comparable growth rates for deposits. This forced both banks and savings banks to resort to alternative sources of financing to cover the growing gap between these two items. Chart A3 shows how the gap between lending and deposits was financed by the banks and savings banks. The former made greater use of interbank borrowing from non-resident credit institutions, while the latter, although they also used this method, chose to reduce their lending positions with resident credit institutions. It should be stressed that in 1999 the component responsible for the imbalance between the growth of investments and resources was not lending and deposit activity but rather the strong growth in the securities portfolio net of repurchase agreements. The factors explaining these developments have already been mentioned in the main text of the report, but it is worth pointing out the difference in the composition of this increase in the portfolio of the banks and savings banks, since in the former there was an increase in the portfolio of fixedincome securities, particularly those issued by non-residents and, to a lesser extent, a fall in outstanding repurchase agreements, while in the savings banks the reductions in outstanding



repurchase agreements and the increase in the equity portfolio were the two items contributing to the growth in the securities portfolio net of repurchase agreements. This could reflect a specific strategy on the part of savings banks. In this respect, it should be noted that the shareholdings of savings banks in non-financial firms rose from 1.35 % of their total balance sheet in 1995 to 2.56 % in the third quarter of 1999, reaching levels similar to those recorded by the banks.

In any event, a clear result of the widening of the gap between lending and deposits has been a deterioration in the net external position of banks and savings banks, with the deterioration in that of the bank's being greater. There were, however, notable differences in the change in composition of this net external position. In the case of banks, there was a similar deterioration in the position vis-à-vis euro-area residents and vis-à-vis the residents of other countries, although the position vis-à-vis the former deteriorated slightly more than that vis-à-vis the latter in 1999. In the savings banks, in 1999, there was an improvement in the net position vis-àvis euro-area residents which was offset by a larger deterioration in the position vis-à-vis the residents of other countries. Accordingly, although both groups of institution resorted to foreign borrowing to cover the gap between the growth in their investments and deposits, the composition of this borrowing differs. In the case of the banks funds obtained in the euro area, probably denominated in euro, predominate. In the case of the savings banks, borrow-

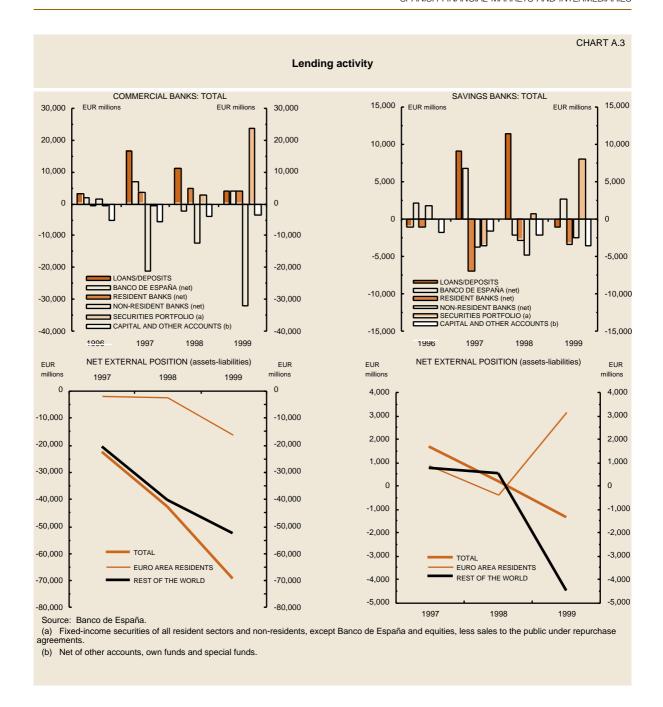


ing from the residents of countries outside the euro area, probably denominated in US dollars, predominates. However, although the financing of savings banks could be considered more risky due to the exchange risk involved (assuming that this risk has not been hedged) the amounts of the same are much lower than those of the banks and hardly represent 1.4 % of the total balance sheet.

Profit and loss account

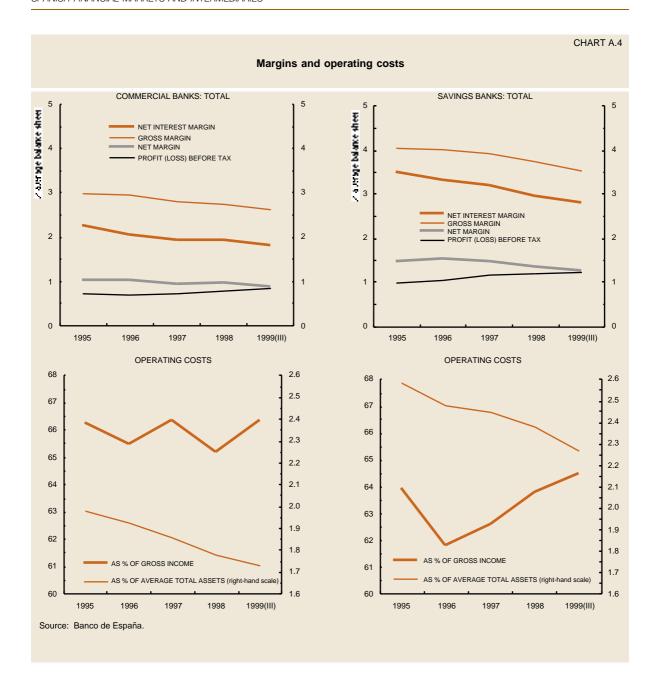
Analysis of the main headings of the profit and loss accounts of banks and savings banks showed that the trends in the two groups of institutions in the period analysed were very similar. There was a tendency for operating margins (the gross margin and net interest margin) to fall, which was offset by a relative decline in operating costs and an improvement in the components of the profit and loss account below net income, as mentioned in the report. However, there are certain notable differences between the two groups owing to the different structure of their business.

As can be seen in Chart A4, the margins of savings banks are still higher than those of banks, as a consequence of the greater weight in their business of lending and deposit activity, in which margins are highest. Moreover, in



the case of savings banks, the margin obtained in this activity is slightly higher than that obtained by banks, probably because of the higher weight in their loan portfolio of loans to individuals which have higher margins than loans to large firms. However, the savings banks are losing this advantage in their margins. During the period analysed the savings banks' margins fell by more than those of the banks: the savings banks' net interest margin fell by 70 basis points, their gross margin by 46 bp and their net margin by 21 bp, while the banks' fell by 46 bp, 38 bp and 13 bp, respectively. Other factors that help to explain these developments include the greater specialisation of the savings banks in lending and deposit activity, which saw the largest falls in operating margins, a larger fall in the margin obtained in the cash operations of the savings banks and the smaller increase in their fees and commissions.

These higher margins in the case of the savings banks in no way reflect a lack of competition or the existence of any kind of segmentation in the markets. As Chart A4 also shows, when operating costs are taken into account, banks and savings banks have much closer ratios. The explanation for these results lies largely in the differences in the structure of the business of the two groups of institution which have been mentioned above. The larger weight of re-



tail activity in the business of the savings banks means that the assets managed per employee are lower than those of the banks where, given the higher relative weight of wholesale activity, the volume of assets managed per employee is much greater. The corollary of this is that retail activity has higher margins. Moreover, It should not be forgotten that there is no legal limitation on banks or savings banks preventing them from concentrating on whichever segment (wholesale or retail) they should wish to. Accordingly, in the present highly competitive environment, the productive specialisation mentioned on various occasions in this annex cannot be attributed to the existence of segmentation in this market.

Indeed, although operating costs (as a percentage of the total balance sheet) have fallen continuously both in banks and savings banks, the reduction has been slightly greater in the latter. The main item explaining this difference is communication and data processing costs, so that very possibly the ultimate reason is the lower impact on savings banks of adaptation to the euro and year-2000 compliance. This could be explained by the fact that a significant part of the adaptation has affected shared systems operated by CECA (Spanish Confederation of Savings Banks), which has helped to reduce the costs involved.

It is interesting to note also that the trends in employees and branches have also differed between banks and saving banks. Although the ratios of total assets to branches and to employees have grown similarly in banks and savings banks, there have been notable differences in the way it which these increases have been achieved. In the case of savings banks the increase has been achieved through an ex-

pansionary policy that has increased both the number of branches and employees, while in the case of the banks both these variables have been reduced in absolute terms. As is to be expected given their productive specialisation discussed above, the banks still have higher ratios than the savings banks.