# FINANCIAL STABILITY REPORT

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# ABBREVIATIONS

| | |
|---|---|
| € | Euro |
| AIAF | Asociación de Intermediarios de Activos Financieros (Association of Securities Dealers) |
| ATA | Average total assets |
| BCBS | Basel Committee on Banking Supervision |
| BIS | Bank for International Settlements |
| bn | Billions |
| bp | Basis points |
| CBE | Banco de España Circular |
| CBSO | Banco de España Central Balance Sheet Data Office |
| CCR | Banco de España Central Credit Register |
| CDS | Credit default swaps |
| CIs | Credit institutions |
| DIs | Deposit institutions |
| ECB | European Central Bank |
| EMBI | Emerging markets bond index |
| EMU | Economic and Monetary Union |
| EU | European Union |
| FSR | Financial Stability Report |
| GDI | Gross disposable income |
| GDP | Gross domestic product |
| GVA | Gross value added |
| GVAmp | Gross value added at market prices |
| ICO | Instituto Oficial de Crédito (Official Credit Institute) |
| ID | Data obtained from individual financial statements |
| IMF | International Monetary Fund |
| LGD | Loss given default |
| m | Millions |
| MEFF | Mercado Español de Futuros y Opciones (Spanish Financial Futures and Options Market) |
| MTS | Market for Treasury Securities |
| NPISH | Non-profit institutions serving households |
| PD | Probability of default |
| PER | Price Earnings Ratio |
| pp | Percentage points |
| ROA | Return on assets |
| ROE | Return on equity |
| RWA | Risk-weighted assets |
| SCIs | Specialised credit institutions |
| SENAF | Sistema Electrónico de Negociación de Activos Financieros (Electronic Financial Asset Trading System) |
| SMEs | Small and medium-sized enterprises |
| SPV | Special purpose vehicle |
| VaR | Value at risk |

CONTENTS

## Introduction

The profitability of Spanish deposit institutions continued to increase in the first half of 2004, while there was a very slight fall in solvency indicators. The favourable results achieved, despite the strongly competitive environment in which the institutions operate, are explained by the growth of their business in Spain, the more favourable performance of their business abroad, the decline in doubtful assets and the increase in efficiency arising from the cost-containment drive.

### *Banking risks*

The sustained growth of economic activity in Spain, together with the recovery in the industrialised countries and Latin America, enabled the growth of the assets of Spanish deposit institutions and, in particular, their financing to the private sector to accelerate. However, the growth of lending and, more specifically, of credit to productive activities, continues to show a marked dichotomy between credit to construction and property development and credit to other sectors. Previous editions of the FSR have already commented on the high *credit risk* displayed by this type of property-linked lending in the last economic downturn in Spain.

Doubtful assets fell significantly year-on-year. Combined with credit growth, this led to a further reduction in the doubtful assets ratios, which was more marked in the case of foreign business. Even so, the latter ratio remained significantly higher than those for business in Spain. The recovery in activity in the developed countries and, among the emerging economies, in Latin America, largely accounts for these developments. The risk profile of the institutions' credit portfolio and of their foreign assets also displayed a downward trend. In short, the ex-post credit risk indicators moved favourably. However, it is worth recalling that there is a very long lag between rapid credit growth and the emergence of doubtful asset problems, and that credit to certain sectors has been increasing at very high rates in recent years.

The high rate of increase in house prices sustained in recent years, the low level of interest rates and the growth of employment and of gross household income continued to be conducive to increases in the indebtedness of Spanish households. Although the financial situation of Spanish households remains solid and their debt burden stable, the sustained growth of their indebtedness makes them increasingly sensitive to adverse shocks. In addition, the high proportion of variable-rate loans increases the sensitivity of the household debt burden to changes in the cost of debt.

Deposit institutions' growing debit balance with the resident private sector, as a consequence of the sustained growth in the financing of firms and households and the more moderate growth in bank liabilities vis-à-vis such residents, is increasingly obliging them to obtain funds through external interbank financing and securities issuance. This has had a negative impact on the cost structure of institutions' financing and, ultimately, on their spreads and margins.

The need for Spanish deposit institutions to finance the strong expansion in credit has led them to develop a strategy involving the increasing *securitisation* of their loan portfolios, especially of their mortgage loans, and to issue more covered bonds (cédulas hipotecarias). At the same time, they are continuing to promote their *asset management* activities. This business, which they conduct both in Spain and abroad, in particular in Latin America, gives Spanish deposit institutions a very significant presence in the management of mutual funds and pension funds. Also, banks use the *insurance companies* they control to supplement the financial

services provided to their customers. This enables them to diversify their sources of revenue and to increase efficiency (economies of range). In general, the insurance companies controlled by Spanish deposit institutions are highly profitable and have a significant presence in the market, although this varies according to the type of insurance concerned.

Stock-market indices have remained relatively steady since the beginning of the year, with a low implied volatility. Official interest rate rises in the United States have been assimilated by the bond markets in an orderly fashion. The *market risk* of Spanish deposit institutions does not seem high, at present, so the results of the trading book were very low in the first half.

The profits of Spanish deposit institutions accelerated in the first half of 2004, extending the trend observed in the last two editions of the FSR. The return on equity (ROE) increased again, with a widening of the spread over long-term public debt. These developments were the result, first, of institutions' lower net provisions and write-downs, owing to the decline in doubtful assets and the substantial amortisation of goodwill in previous years; and, second, of the increase in efficiency arising from the cost-containment drive by institutions.

***Profitability***

For the first time since the FSR began to be published in November 2002, all three profit margins rose, in absolute terms, for Spanish deposit institutions as a whole. These increases stem from the strong growth in activity, with an acceleration of business in Spain and a much less unfavourable performance by foreign business, following the declines seen in recent years, and they occurred in spite of the further narrowing of the spread between the return on assets and the cost of liabilities in business in Spain. Asset management and insurance activities enabled commissions to grow in line with total assets. Finally, the low growth of operating expenses, well below that of activity, made it possible for the efficiency ratio to improve and contributed to the growth in profits. The favourable trend in provisions and write-downs (country-risk provisions and amortisation of goodwill) was an additional element contributing to a further increase in the ROE.

The comparison with European banks, based on December 2003 data, once again highlights the solid position of Spanish institutions in terms of profitability. The ROE of Spanish institutions is significantly higher than the European average as a result of wider margins, the growth in activity, similar operating expenses, in relative terms, and greater efficiency.

***Solvency***

The solvency ratios deteriorated slightly, with capital growing somewhat less than requirements. Tier 1 capital increased as a result of the improvement in bank profits, with the consequent rise in reserves, despite the increase in goodwill and the relative stability of preference shares. Tier 2 capital grew as a result of the acceleration in the issuance of subordinated debt. The growth of activity and, especially, of credit led to an increase in risk-weighted assets.

The cyclical position of the Spanish economy remained favourable, leading to a reduction in the requirements for specific loan loss provisions. As a result, the statistical fund continued to grow, enabling a significant number of institutions to reach the fund ceiling.

In comparison with other European countries, the total solvency ratio and the tier-1 ratio of Spanish credit institutions are slightly below average. This situation is explained by the strong growth of lending activity and, therefore, of risk-weighted assets in Spain. Spanish prudential provisioning requirements should also be mentioned, a factor that significantly helps to strengthen the stability of the Spanish financial system.

In short, the growth of business, especially in Spain, and the cost-containment drive have borne fruit in terms of an acceleration in profits and a significant increase in the return on equity. However, the strong growth in lending linked to the property sector means that the institutions must closely manage their credit risk.

## *I.1 Introduction to Spanish deposit institutions' risk*

The conclusions drawn from an analysis of the consolidated balance sheets of Spanish deposit institutions are similar to those reflected in the last FSR. In particular, the dynamism of business in Spain, together with the increase, albeit modest, in the total assets of foreign business, for the first time since 2001, is responsible for the acceleration in the total assets of deposit institutions. The growth in business in Spain is largely explained by financing to the private sector, which again grew at higher rates than the most traditional bank liabilities. Also, doubtful assets fell and the doubtful assets ratios are, once again at historical lows.

### CONSOLIDATED BALANCE SHEETS[1]

The total assets of Spanish deposit institutions continued to follow the trend identified in the last FSR. Their growth rate in June 2004 (12.7%) was 6.6 pp up on the same period a year earlier[2] and the highest recorded since mid-2001 (Table I.1).

This growth is basically explained by business in Spain. With a weight of somewhat more than 85% of total assets, business in Spain increased by 14.9%, 4 pp more than in June 2003. At the same time, the total assets of foreign business increased for the first time since mid-2001 (by 1.4%, as against –12.7% in June 2003). The relative improvement in the economic and financial situation in Latin America and the trend in the region's main currencies against the euro help to explain this behaviour.

That said, the disparity between the growth rates in Spain and abroad means that the relative weight of foreign business in the consolidated balance sheets of Spanish deposit institutions fell once again, from 16.5% to 14.8%. A new low was therefore reached, confirming the downward trend that has followed a period of intense expansion by Spanish banks in Latin America. At its peak, in December 2000, foreign business accounted for 27.6% of total assets.

As regards the structure of *assets,* the relative weight of financing to the private sector continued to increase, and now represents 59.8% of total assets, almost 2 pp more than in the same period a year earlier (Chart I.1A). The growth rate of this item (16.6%) was the highest since mid-2001 and 5.5 pp above last year's rate.

The performance of financing to the private sector was largely attributable to business in Spain, where it grew by 17.8% (4 pp more than in June 2003), driven by the vigorous growth in secured lending. Although such lending has slowed slightly (by 13 bp), it is still growing at a rate of over 20%. In foreign business, confirming the trend identified in the last FSR, financing to the private sector also grew, following the declines that had been recorded from end-2001. In particular, growth of 7.3% was recorded in June 2004, as against a fall of 5.2% last year.

Total doubtful assets declined at a rate of 14.6%, compared with the increase of 6.8% recorded in the same period of the previous year. This behaviour was attributable to both business in Spain (–5.6%, against 4.8%) and foreign business (–28.9%, against 10.1%), in both cases confirming the decline seen in December 2003.

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**1.** The data presented in Table I.1 relating to dates prior to June 2004 may have changed slightly from those published in previous editions of the FSR owing to revisions made by the institutions themselves and to changes in the composition of consolidated groups. These minor changes in no way alter the conclusions drawn earlier. **2.** Unless otherwise stated, amounts relate to June 2004 and comparisons are always between that month and June 2003.

**CONSOLIDATED BALANCE SHEET** TABLE I.1

Deposit institutions

| ASSETS | JUN-04 (€m) | RELATIVE WEIGHT IN JUN-04 | CH. J-03/J-02 (%) | CH. J-04/J-03 (%) |
|---|---|---|---|---|
| Cash on hand and on deposit at Central Banks | 29,207 | 1.7 | 5.3 | 8.6 |
| Due from credit institutions | 190,781 | 11.1 | 4.7 | 6.1 |
| Credit to general government | 49,306 | 2.9 | –9.6 | 4.7 |
| Credit to private sector | 961,860 | 55.8 | 11.6 | 15.4 |
| Fixed-income portfolio | 278,230 | 16.1 | 0.9 | 15.3 |
| Doubtful assets | 10,460 | 0.6 | 6.8 | –14.6 |
| Equity portfolio | 70,528 | 4.1 | 1.3 | 23.7 |
| Property and equipment | 25,082 | 1.5 | –5.4 | –0.3 |
| Goodwill in consolidation | 18,330 | 1.1 | –16.0 | 7.0 |
| Intangible assets | 1,499 | 0.1 | –8.3 | –4.8 |
| Own stakes and shareholders | 408 | 0.0 | –52.6 | 81.0 |
| Other assets | 51,416 | 3.0 | 1.4 | 0.3 |
| Accrual accounts | 22,846 | 1.3 | –11.1 | –4.0 |
| Prior year's losses at the controlling entity | 699 | 0.0 | 17.9 | 23.4 |
| Losses at consolidated companies | 14,210 | 0.8 | 8.7 | 12.7 |
| **TOTAL ASSETS** | **1,724,926** | **100** | **6.1** | **12.7** |
| Memorandum item | | | | |
| Financing to private sector | 1,032,362 | 59.8 | 11.1 | 16.6 |
| Financing to general government | 230,297 | 13.4 | –2.5 | 3.2 |

| LIABILITIES | JUN-04 (€m) | RELATIVE WEIGHT IN JUN-04 | CH. J-03/J-02 (%) | CH. J-04/J-03 (%) |
|---|---|---|---|---|
| Central Banks | 31,147 | 1.8 | 0.1 | 31.8 |
| Due to credit institutions | 317,320 | 18.4 | 9.3 | 22.3 |
| Credit from general government | 49,349 | 2.9 | 9.6 | 7.9 |
| Customer deposits | 867,145 | 50.3 | 4.3 | 9.4 |
| Marketable debt securities | 170,074 | 9.9 | 21.4 | 28.4 |
| Other liabilities | 50,629 | 2.9 | 9.3 | 2.3 |
| Accrual accounts | 19,808 | 1.1 | –13.2 | –8.5 |
| Provisions | 54,204 | 3.1 | –2.7 | 3.7 |
| Negative difference in consolidation | 196 | 0.0 | 67.9 | –10.7 |
| Subordinated debt | 35,238 | 2.0 | 7.4 | 6.2 |
| Minority interest | 20,031 | 1.2 | 1.2 | –4.7 |
| Capital stock | 9,080 | 0.5 | 2.7 | 3.6 |
| Reserves | 68,766 | 4.0 | 5.1 | 9.8 |
| Reserves at consolidated companies | 24,062 | 1.4 | 1.9 | 15.5 |
| Net income (+/–) | 7,814 | 0.5 | 7.7 | 14.8 |
| Group | 7,065 | 0.4 | 11.0 | 19.4 |
| **TOTAL LIABILITIES** | **1,724,926** | **100** | **6.1** | **12.7** |

SOURCE: Banco de España.

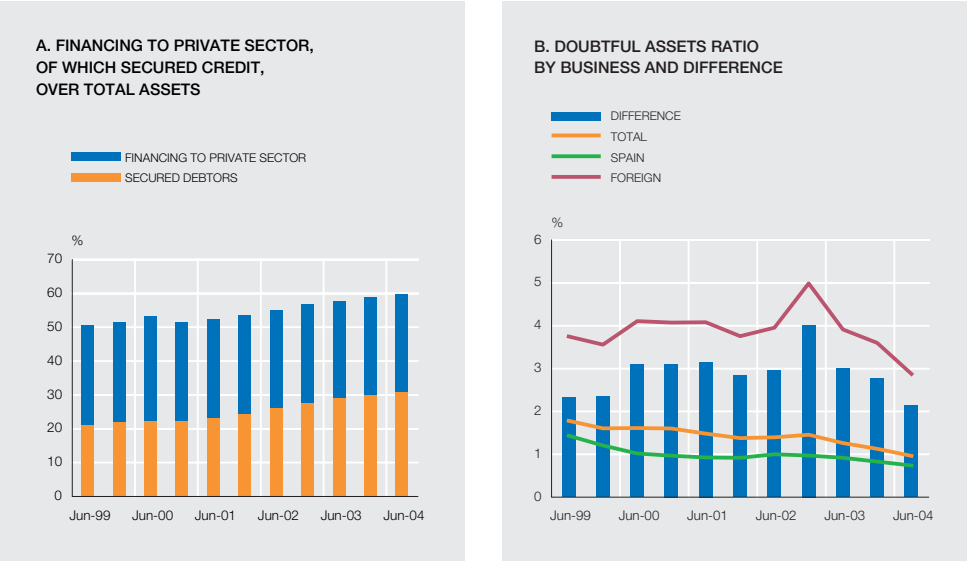
The growth of financing to the private sector, together with the decline in doubtful assets, led to a further reduction in the doubtful assets ratio, which is now 4 bp below 1%. This was attributable both to business in Spain and foreign business, although significant differences persist between them (Chart I.1B). However, these differences have narrowed from their peak in December 2002. This may be, among other factors, because of the relative improvement in the Latin American situation, as well as the management improvements introduced by Spanish institutions.

Continuing a trend that began in mid-2001, the relative weight of financing to general government fell. However, after falling by 2.5% last year, financing to general government increased by 3.2%, so that, as reported in the last edition of the FSR, the rate turned positive. That said, the magnitude of this change was smaller than it would have been, because the growth in foreign business, for the first time since end-2001, was offset by the slowdown in business in Spain. In foreign business, the relative weight of financing to general government rose to 22.8% of total business, cutting short the ongoing decline from December 2000, when it accounted for 45.6% of total business.

The equity portfolio grew at a rate of 23.7%, the highest since end-2000, as a result of its behaviour in Spanish business. Its relative weight rose by 36 bp. The possibility, mentioned in the previous FSR, of a change in trend in this item against the background of a more stable stock market seems to have been confirmed.

FINANCING EXTENDED AND DOUBTFUL ASSETS RATIOS CHART I.1

Deposit institutions




SOURCE: Banco de España.

Despite its growth of 7%, following a 16% fall last year, goodwill continues to represent around 1% of total assets.

Turning to *liabilities,* the rate of growth of residents' deposits, as in the period covered by the last FSR, continued to accelerate, from 4.3% in June 2003 to 9.4%. However, as this item grew more slowly than total assets its relative weight fell by 1.5 pp to 50.3%. In addition, it continued to grow more slowly than financing to the private sector.

In line with what has been noted in previous reports, to compensate for the behaviour of residents' deposits, the rate of growth of foreign interbank financing accelerated, by 13 pp, as did that of marketable debt securities, which grew by almost 7 pp more than a year earlier. The relative weight of both items increased, to 18.4% and 9.9% of total assets, respectively.

Subordinated debt, meanwhile, grew with respect to June 2003, but less vigorously (1.2 pp less). Its relative weight, therefore, continued to decline, to below its December 2001 levels. Preference shares also declined in relative importance, since their rate of change was again negative, although close to zero (–0.6%).

Finally, the favourable behaviour of Spanish institutions' profits, already mentioned in the previous FSR, was confirmed by group net income, which grew by 19.4%.

ASSET MANAGEMENT

As well as offering claims on banks, deposit institutions provide asset management services, through different companies, to their customers. In June 2004, the assets managed by deposit institutions' management companies totalled €343,300 million. Their rate of growth with respect to June 2003 was 25.1% and their annual average growth rate over the last five years 10.8%. However, the growth in assets managed has not been uniform across the countries of residence of the deposit institutions' management companies. Between June 1999 and June 2004, the total assets managed by those based in Spain fell by 9 pp in favour of those based abroad; in June 2004 the former managed 82.5% of total assets, down from 91.5% five years previously. Management companies in Latin America gained 5.3 pp to account for 12.9% of total managed assets, those in the rest of the former European Union (EU-15) gained 1.2

ASSET MANAGEMENT CHART I.2


SOURCE: Banco de España.

points to account for 1.6% and those in the other developed countries gained their current share of 2.8% (Chart I.2A).

The selling by institutions of shares in portfolio investment institutions, pension funds and securitisation SPVs competes to attract customer savings with bank products (sight accounts, time deposits, debt securities, etc.). For deposit institutions, managed assets represent 24% of all the funds raised from customers (i.e. non-interbank interest-bearing liabilities plus managed assets). However, there are significant differences between banks and savings banks. In the former this percentage was 33% in June 2004, while in savings banks it was 12.3%. Accordingly, banks are more specialised in asset management. This may be partly attributable to the demands of their customers and partly to their business strategy.

The share of banks in all the assets managed by banks and savings banks has fluctuated at around 80% over the past five years. This share falls to 77% if we consider only those assets managed by Spanish management companies (Chart I.2B).

In terms of the type of institution managed (Charts I.2C and I.2D), and taking all the countries together, in June 2004, capital market mutual funds continued to account for the highest weight of the assets managed both by the management companies of banks (45% of the total), and by those of savings banks (52.3% of the total), despite the fall in their relative weight since June 1999. This relative importance in both groups is mainly attributable to their weight in Spain. For banks, the next most important type of institution is pension funds which account for 20.7% of the total. Of these, somewhat more than 56% are managed in Latin America. For savings banks, meanwhile, the next type of institution in order of importance are mortgage securitisation SPVs with 13.2% of the total managed assets, owing to their weight in Spain, although banks actually manage more assets in Spain through these institutions than do savings banks. The other types of institution, mostly non-mortgage securitisation SPVs, account for 10.2% of managed assets in banks and 3.6% in savings banks and their management companies are mainly located in Spain. Finally, the assets managed by money market funds are practically all Spanish.

In the Spanish market, the share of the assets of portfolio investment institutions, securitisation SPVs and pension funds managed by the management companies of deposit institutions has not varied with respect to the situation described in the previous FSR. They manage around 20% of the total assets of money market funds, 73% of those of open-end investment companies, 27% of those of closed-end investment companies, 48% of those of securitisation SPVs and 50% of those of pension funds.

INSURANCE COMPANIES

In Spain, in the economic and financial groups made up of deposit institutions and insurance undertakings, also known as financial conglomerates *(bancassurance* in international terminology), the latter are generally controlled by the former. More than 90% of the total assets of Spanish insurance companies[3] are accounted for by *sociedades anónimas* (public limited companies) some of which are controlled by deposit institutions. In this way, Spanish deposit institutions diversify their business since the assets and liabilities of insurance companies, especially those in the life business, are generally savings products with much longer maturities than those of banks. Deposit institutions use their branch networks to offer both banking and insurance products, thereby extending the range and quality of the services provided to their customers, while diversifying their sources of income and increasing their productivity, through the generation of scope economies.

Deposit institutions control about 100% of the Spanish insurance companies (except when the latter are multigroup companies[4]) belonging to their economic group, which are the ones this FSR focuses on. In addition, they do not control but are associated with and/or have small stakes in other insurance companies, which are not considered here.

The Spanish insurance companies controlled by deposit institutions in 2002 (the latest period for which data are available), accounted for 40.6% of the total assets of insurance companies (which are sociedades anónimas). By business[5], they accounted for almost 56% of life, 40.5%

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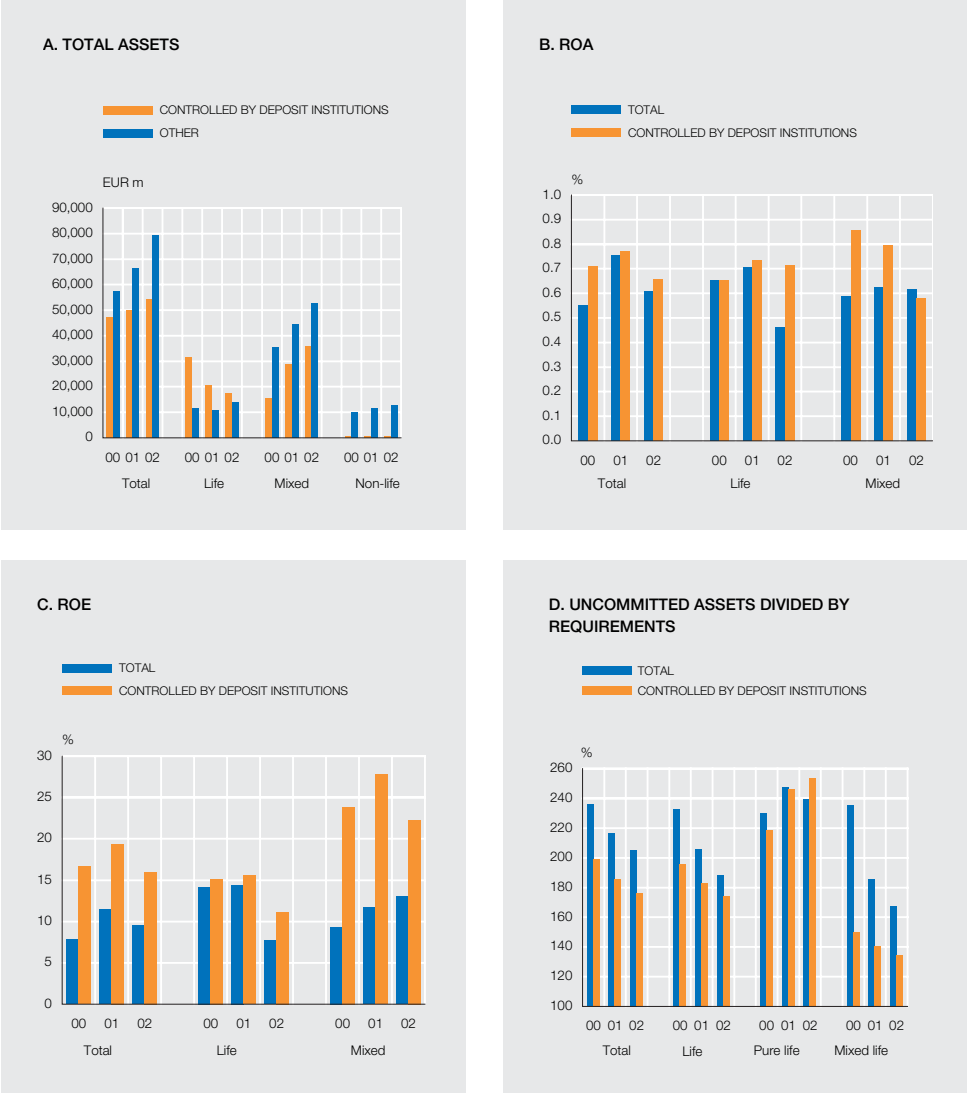
**3.** Insurance companies are considered to include, in addition to *sociedades anónimas,* mutual insurance companies, branches of non-EU insurance companies and pure reinsurance companies. **4.** Multigroup companies are those whose capital is owned by two or more entities, which do not belong to the same group and which jointly manage such companies. **5.** Insurance *sociedades anónimas* are classified as life, non-life or mixed (which operate in both the life and the non-life businesses). Inclusion in one or the other category is based on their profit and loss account. In a particular year, mixed undertakings are those that present both technical life and non-life accounts.

INSURANCE COMPANIES CHART I.3




SOURCES: DGSFP and BE calculation.

of mixed and 5.2% of non-life insurance companies' assets (Chart I.3A). In addition, separating the activity of all the mixed companies into life and non-life (using for this purpose the life/non-life breakdown of the net reported reinsurance premiums of mixed undertakings) shows that the mixed companies controlled by deposit institutions represent 45% of total mixed life business premiums and 2.7% of the non-life. There is therefore a clear specialisation by deposit institutions in the life business.

Insurance companies are highly leveraged institutions owing to the large volume of insurance technical provisions they require (especially the mathematical provisions required by the life business) which are policyholders' financial savings. Accordingly, their return on assets (ROA) is low, in comparison with other less leveraged types of non-financial corporations. Their return on equity (ROE) is relatively high. There are differences, in terms of returns, between insurance companies as a whole and those controlled by deposit institutions (Charts I.3B and I.3C). Those controlled by deposit institutions, with a somewhat higher ROA than that of insurance companies as a whole, also have a significantly higher ROE, partly on account of their higher leverage.

The solvency margin[6] of insurance companies and of those controlled by deposit institutions is, in general, much higher than the minimum level or the regulatory minimum requirements. In the period 2000-2002, the insurance companies of deposit institutions had a somewhat smaller excess to requirements than insurance companies as a whole, since the solvency margin of the life business of mixed insurance companies is closer to the minimum level (albeit comfortably above it) than in other businesses. (Chart I.3D).

In short, the insurance activity carried out by Spanish deposit institutions through the insurance companies they control shows that their position in the insurance business is solid, both in terms of profitability and own funds. This, in turn, reinforces the stability of deposit institutions and, by extension, that of the Spanish financial system as a whole.

EVOLUTION OF RISKS

*Financing to the resident private sector,* according to individual balance sheet data, accelerated in the first half of 2004 (16.9% growth in June, as against 14.2% in the same period a year earlier), extending the trend maintained over the last two years. Notable in credit to productive activities is the increasing divergence between the growth of financing to construction and property development companies (growth of 34.4%) and that to other firms which, despite accelerating in the first half of 2004, still failed to reach double figures (9.4%). The significant acceleration in credit to firms since the end of 2001 is, almost exclusively, the result of substantial growth in that to the construction sector and, in particular, to the property development sector (Chart I.4A).

In the first half of 2004, credit to construction firms accelerated significantly (from 15.1% in December 2003 to 22.8% in June 2004), while credit to property developers continued to grow at very high rates (44.4% in June 2004) without any sign of a slowdown. In contrast, the high rate of growth of credit for house purchase remained relatively steady in the first half of this year at 17.1%. This was compatible with a slight acceleration in the financing actually received by households for this purpose which, along with loans on the balance sheets of the institutions, includes those removed as a result of securitisation. Previous editions of the FSR have highlighted the higher credit risk (that gives rise to very high doubtful assets ratios) historically displayed by financing to property firms in Spanish economic downturns.

The growing dichotomy between credit to the construction and property development sector and to other firms explains why the change in the former accounts for about two-thirds of the growth in total credit to firms in June 2004, up from one-fifth at end-1998 (Chart I.4B). Over the same period, the relative weight of credit to construction and property development increased from 11.9% to 19.8% of all credit to firms between these two dates.

As in the periods covered by previous editions of the FSR, *doubtful assets ratios* continued to move favourably, edging down from their December 2003 level. The doubtful assets ratio for credit to productive activities stood at 0.8% while that for credit to households was 0.58% (0.30% for house purchase and 1.62% for consumption). However, across branches of activity there are substantial differences between the level of the ratio (Chart I.4C and I.4D), partly arising from the intrinsic characteristics of each of them, but also from the growth rate of credit in recent years. Although the doubtful assets ratio for credit to construction and property development is among the lowest, the doubtful assets of these sectors are growing apace (11.1% in construction and 30% in property development in June 2004), but this is offset by the higher growth of credit.

The presence of Spanish deposit institutions abroad continued to edge down during 2004, owing to the reduction in assets in Latin America, extending the trend that commenced in

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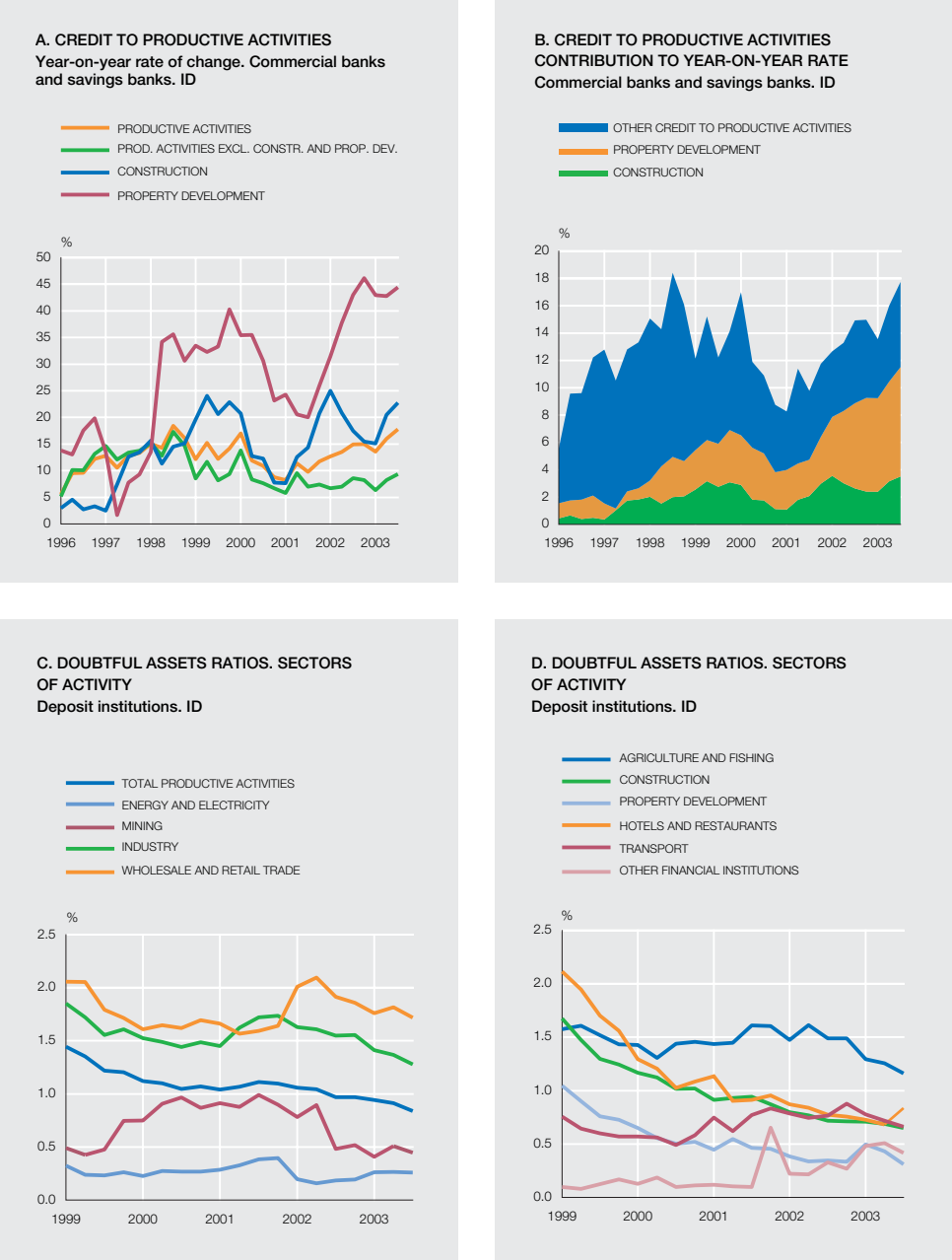
**6.** Uncommitted assets, equivalent to the own funds of deposit institutions.

CREDIT AND DOUBTFUL ASSETS RATIOS CHART I.4




SOURCE: Banco de España.

2002, and despite the increase in their presence in developed countries (Chart I.5A). The appreciation of the euro and the new business strategies, which in the first half focused on building up the businesses acquired, explain these changes. Since 2002, among the assets in which institutions in Latin America (where almost all the external assets that Spanish deposit institutions have in emerging countries are located) invest, there has been a decline in the relative weight of government securities, which has basically been absorbed by interbank assets, while the financing to the resident private sector has been relatively stable (Chart I.5B).

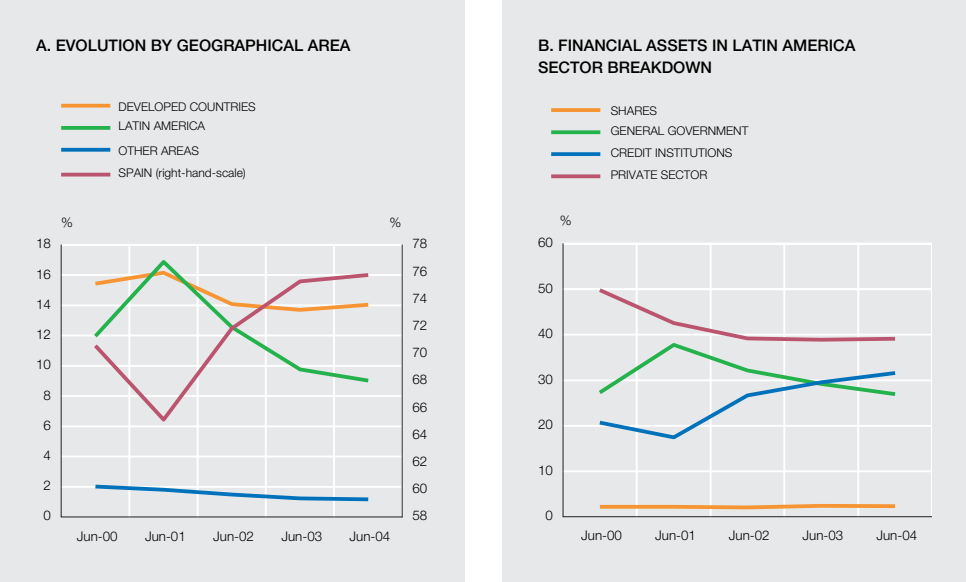
The reorientation of external financial assets and the decline in credit risk in Latin America are responsible for the decline in the *risk profile of the external assets*[7] of Spanish institutions. In

**7.** A more detailed analysis is to be found in Chapter III.

FINANCIAL ASSETS ABROAD

CHART I.5

Deposit institutions




SOURCE: Banco de España.

addition, for most countries, sovereign differentials during 2004 have been at their lowest levels in recent years.

The *debit balance* of Spanish credit institutions with the *resident private sector* continued to increase in the first half of 2004, extending the trend of recent years (Chart I.6A). The imbalance between investment and financing vis-à-vis the resident private sector, as in 2003, was basically financed by a greater recourse to the international interbank market, which also served to reduce the liabilities with other non-resident sectors. In previous editions of the FSR the challenges that this trend in the balance with the resident private sector has posed have been analysed in detail, not only from the viewpoint of its medium-term sustainability, but also of the impact on the profitability of the institutions.

The *cost of liabilities* obtained by the institutions differs substantially according to the origin of the funds (resident or non-resident) and the instrument (Charts I.6B and C). It is more expensive to raise funds from non-resident creditors or on the interbank market than from residents. In the case of residents there are substantial differences according to the instrument. In recent years, the financing of the high growth of credit to the resident private sector by raising funds on the interbank market or by issuing debt securities and, to a lesser extent, subordinated debt has affected the cost structure of bank liabilities (Chart I.6D), which has in turn put pressure on institutions' margins.

Since the last FSR, *stock markets* have tended to stagnate, while implied volatilities have been low, in Spain and in the rest of Europe and also in the United States.

## *I.2 Credit risk*

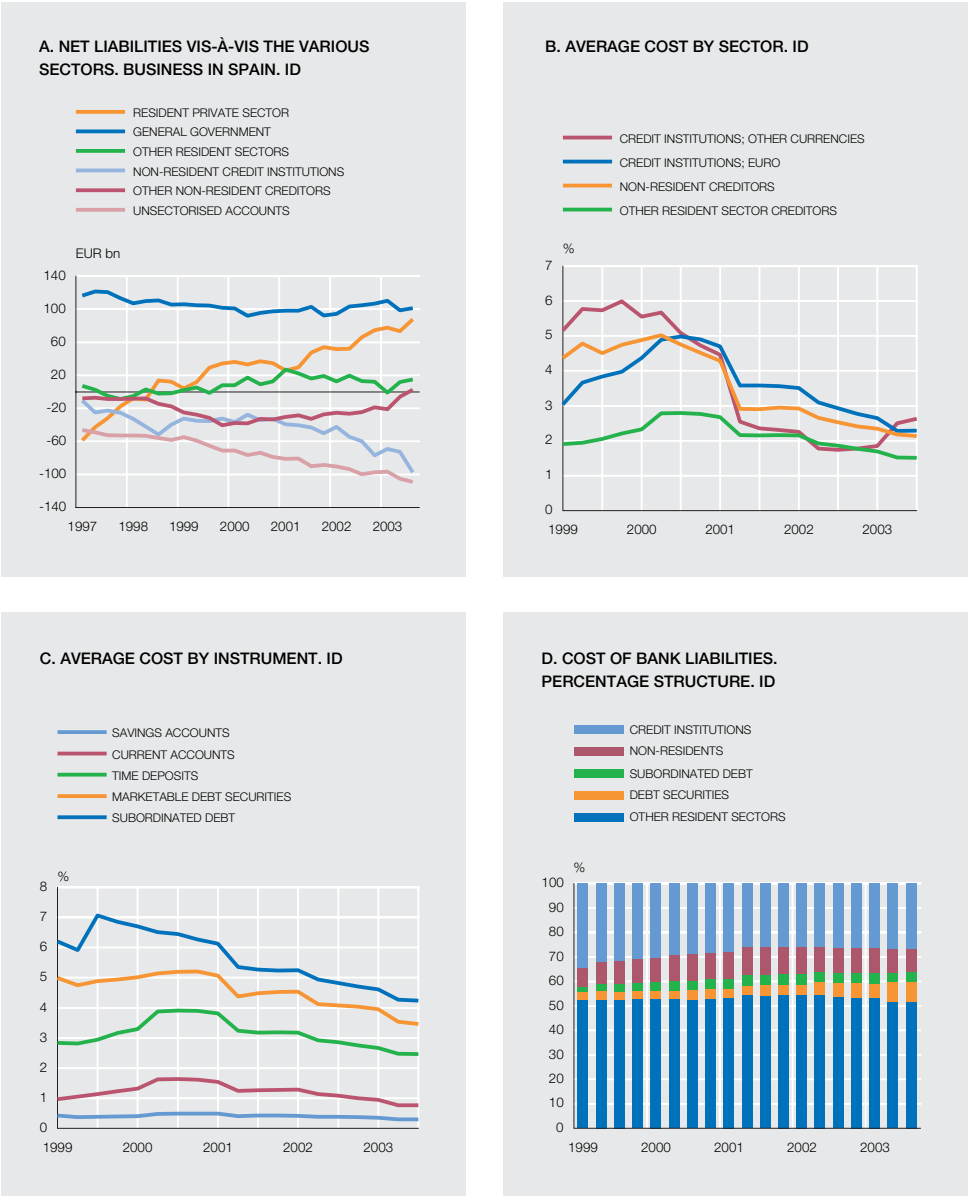
### I.2.1 IMPACT OF THE MACROECONOMIC BACKGROUND

#### a. Spain and the euro area

The latest available *euro area* data, for Q2, confirm the continuity of the economic upturn from end-2003. The quarter-on-quarter rate of change of GDP stood at 0.5%, boosted by the United States and the Asian countries, while in year-on-year terms the rate was 2%, up 0.6 pp on the previous quarter (Chart I.7). In *Spain,* the rate of change of GDP, quarter-on-quarter, was also 0.5%, while the year-on-year rate of growth, although still higher than in the euro area as a whole, fell to 2.6%, down 0.1 pp on Q1.

NET LIABILITIES AND AVERAGE COST OF BANK LIABILITIES CHART I.6

Commercial banks and savings banks



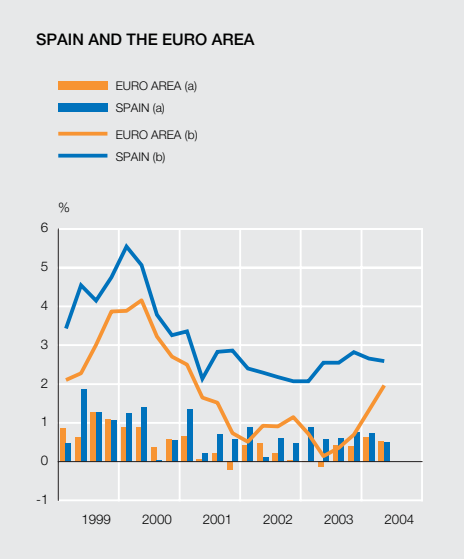

SOURCE: Banco de España.

In the first half of 2004 there were no significant corrections to any of the developments that have been identified in previous editions of the FSR as risk factors for economic growth in Spain in the medium term. Household debt continued to grow at high rates, house prices still showed no signs of adjusting towards levels closer to those indicated by their long-term determinants and the inflation differential vis-à-vis the euro area widened again to 1.1 pp.

Non-financial corporations

The *results* of the corporations that report to the Banco de España Central Balance Sheet Data Office (CBSO) were again very favourable in the first half of 2004. Gross operating profit grew at a year-on-year rate of 7.2%, similar to the rate recorded in the same period a year earlier, and ordinary net profit (which includes financial revenue and financial costs) grew by 22.5%, well above the rate in the same period of 2003 (12.1%). The decline in financial costs and, especially, the increase in financial revenue, which increased by 21.7% owing to the divi-

GDP CHART I.7




SOURCES: INE and Eurostat.
a. Quarter-on-quarter rates.
b. Year-on-year rates.

dends obtained from subsidiaries abroad, both contributed to this growth in ordinary net profit. By contrast, net profit fell by 9.3%, basically as a result of the fall in extraordinary income. Analysts' expectations regarding both the short and long-term trend in listed firms' earnings also generally improved.

The good ordinary profit figures meant that the *profitability* ratios remained high. The ordinary returns on investment and on equity both improved, to 7.6% and 10.7%, respectively. In addition, there was a fall in the percentage of firms for which these indicators were negative. This, along with the fresh reduction in the cost of borrowing, meant that the spread between the ordinary return on investment and the average cost of borrowed funds widened by 1.2 pp from 2003 Q1, to 3.7%.

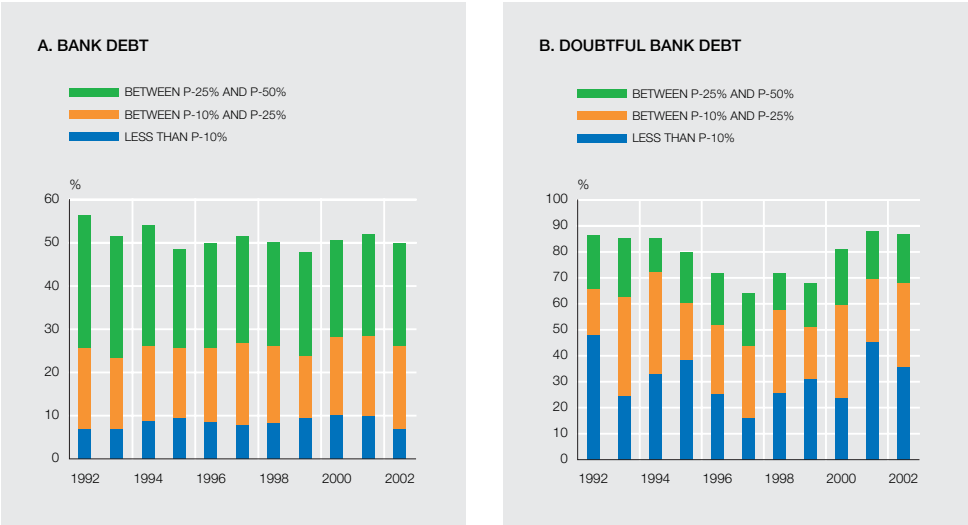
The total financing received by Spanish non-financial corporations (through credit from financial institutions and securities issuance) accelerated slightly during the first half of 2004, to a rate of expansion of around 14% in June, which led to a further increase in aggregate *debt* ratios. In the case of large firms, this indicator fell slightly, as a result of the more expansionary behaviour of the denominator of the ratio (gross operating profit plus financial revenue). Despite the growth in aggregate debt, the reduction in the cost of debt enabled the related debt burden to remain at moderate levels. In fact, it declined slightly with respect to end-2003. Also the total debt-burden (interest plus short-term debt) ratio fell somewhat for the firms reporting to the CBSO.

The favourable trend in actual and expected company profits, along with the maintenance of a solid financial position, which was reflected in a decline in insolvencies, led to a further reduction in the credit risk premiums for non-financial corporations on credit derivative markets.

The last edition of the FSR documented a substantial decline in the debt burden arising from interest over the last decade, across all branches of activity, which was related to the fall in interest rates prompted by the adoption of the euro. Chart I.8A and B shows the distribution

DISTRIBUTION OF THE TOTAL AND DOUBTFUL BANK DEBT OF NON-FINANCIAL FIRMS BY DEBT-BURDEN PERCENTILES

CHART I.8




SOURCES: Informa and Banco de España.

of total bank debt and of doubtful bank debt by brackets of the distribution of the debt burden[8] among Spanish non-financial corporations for the period 1992-2002[9].

The distribution of bank debt by debt-burden percentiles is very uniform (Chart I.8A). The 10% of firms with the highest debt burden account for around 10% of bank debt. In consequence, there do not seem to be any significant differences in the average levels of bank debt between firms with different debt burdens.

By contrast, there is a clear relationship between the level of firms' debt burden and the impact of doubtful assets (Chart I.8B). Specifically, the 50% of firms with a lower ratio of profits to financial costs, which account for around half of bank debt, account for nearly 90% of doubtful bank debt. Moreover, this relationship is not proportional since, on average, the 10% of firms with a lower market capitalisation-to-debt ratio account for around 30% of doubtful bank debt. Accordingly, the debt burden (or the market capitalisation relative to debt) of non-financial corporations is a very significant indicator of their financial situation. As already discussed in the last edition of the FSR, the level of the debt burden of Spanish firms is low from a ten-year perspective.

Households

In the first half of 2004, households continued to resort heavily to borrowing. In fact the rate of change of household borrowing increased to around 20%. This growth stemmed from the acceleration in financing for house purchase (which includes both loans on bank balance sheets and those removed therefrom as a result of their securitisation) and the maintenance of the rate of growth of credit for consumption and other purposes.

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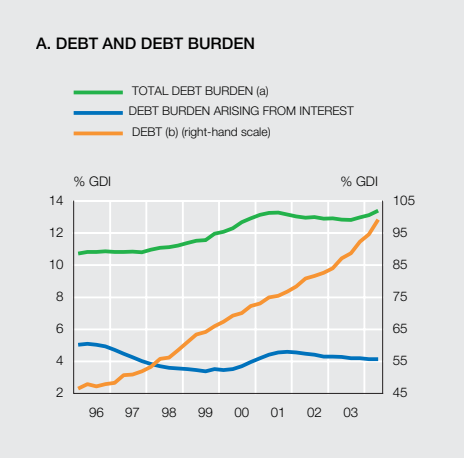
**8.** The debt burden is defined as the inverse of the ratio of profit before interest and taxes, including financial revenue, to financial costs. This ratio is simply the result of dividing the market value of the company by the volume of its debt, as explained in the paper by S. Ruano and V. Salas: "Indicadores de riesgo a partir de los resultados contables de las empresas" included in issue number 7 of *Estabilidad Financiera*. **9.** The information is obtained by contrasting the firm-level data provided by the Mercantile Register and the Central Credit Register (CCR). In particular, the accounting data have been taken from the Mercantile Register, while the information on total bank debt and doubtful debt have been taken from the CCR. After applying various filters to the accounting information to exclude firms reporting inconsistent information, the database used to prepare Chart I.8 contains information for, on average, over 100,000 firms (the minimum being 30,000 firms in 1992, and the maximum some 165,000 in 2000).

HOUSEHOLD DEBT CHART I.9




SOURCE: Banco de España.
a. Estimation of interest and capital payments.
b. Including bank credit and securitisation.

As a result of this behaviour of financing, and also of the more moderate growth in household gross disposable income, levels of *indebtedness* reached 95% of household GDI in June (Chart I.9). The related debt burden also increased relative to GDI for the third quarter running, despite the reduction in the portion corresponding to interest payments and reached the high levels recorded in 2001. Meanwhile, household wealth increased again in the first half of the year, basically as a result of the rise in house prices, since net financial wealth remained relatively stable.

The aggregate financial position of households remained solid. However, as pointed out in the last edition of the FSR, the high level of their indebtedness has increased their sensitivity to adverse shocks and, also, the very high proportion of floating rate loans has increased the sensitivity of the debt burden to changes in the cost of debt. In addition, as seen in Box I.1, the available disaggregated information shows a high dispersion in the financial position across households. Accordingly, the ability of a certain proportion of households to meet the payments on debts contracted would be lower than the aggregate indicators suggest.

b. Rest of the world

In the international economy, the rate of economic activity increased across the board in the first half of 2004. This positive performance led to a fresh upward revision in growth expectations for the year as a whole to close to 5%, notably higher than the 3.9% rate recorded in 2003. The economic recovery was particularly marked in the first quarter, especially in the United States and in the Asian economies, particularly China and Japan. There was also a strong upturn in activity in other emerging areas such as Latin America. The higher rate of economic growth was accompanied by more buoyant world trade and a recovery in industrial production. Subsequently, in the second quarter, the data relating to the United States, Japan and, to a much lesser extent, China, the world economy's main engines, exhibited some weakness, without changing the central scenario of notable growth for the year as a whole. Inflationary pressures increased slightly, although they remain at moderate levels, despite the strong rise in commodity and oil prices, which could firm. The behaviour in the coming months of the demand and supply factors that affect the price of oil will be important to assess the impact on world economic activity of its current levels.

In the *United States,* gross domestic product grew in 2004 Q2 at a year-on-year rate of 4.7%, as against 5.0% in Q1. The main reason for this slowdown was a significant reduction in the

## THE DEBT BURDEN OF SPANISH HOUSEHOLDS. A DISAGGREATED ANALYSIS

BOX I.1

The European Community Household Panel (ECHP), compiled by Eurostat at the Community level, includes a set of variables that enables certain aspects of the financial position of households to be studied in some detail. For the available sample period (1994-2000), the panel enables the statistical distribution of the debt burden associated with the acquisition of a first home, defined as the ratio between the payments linked to loans for such purpose (repayment of capital and interest) and the total net income of the household unit, to be analysed. It is also possible to examine the relationship between the debt burden and factors that may influence the ability of households to pay their debts, such as their income, wealth (approximated using capital and rental income) and the age of the household head.

Analysing the distribution of the debt burden of Spanish households on the basis of the ECHP shows that it is widely dispersed. More than 75% of the households interviewed did not have any debt on the houses they were living in, though this percentage trended downwards in the period considered, while approximately 10% of those that did have loans of this type devoted more than 40% of their income to their repayment[1]. It is also interesting to note that the debt burden of the representative indebted household (that whose ratio coincides with the median of the distribution) was more than four times the sector mean. These results illustrate the relevance of using microeconomic data to characterise more precisely the financial position of those households relevant to the analysis of financial stability. As is well known, the emphasis in such analyses should be on the distribution tails rather than on their mean values.

The ECHP also enables the profile of households with the largest financial burdens to be characterised. As Table 1 shows, the 10% of household units with a loan for house purchase that, in the period analysed, had the highest debt burden, tended to be concentrated in the population segments with comparatively low levels of income and wealth. In principle, this restricts their ability to pay their debts in the event of adverse changes in interest rates or in their income. However, the heads of such households were relatively young, so that the potential growth of their income can generally be considered higher. This would be conducive to their access to additional financing in credit markets in the event that any of the unfavourable developments referred to above take place.

1. For more details, see "La carga financiera de las familias españolas: un primer análisis desagregado", Banco de España, Boletín Económico, June 2004 issue.

PROFILE OF THE HOUSEHOLD WITH THE HIGHEST DEBT BURDEN (ABOVE THE 90TH PERCENTILE OF THE DISTRIBUTION): TOTAL INCOME, CAPITAL AND RENTAL INCOME, AND AGE OF HOUSEHOLD HEAD

TABLE 1

| | 1994 | 1997 | 2000 |
|---|---|---|---|
| TOTAL INCOME (a) | | | |
| Income <25p | 46.9 | 71.8 | 46.5 |
| Income between 25p and 50p | 21.8 | 10.8 | 34.4 |
| Income between 50p and 75p | 25.3 | 14.4 | 11.4 |
| Income >75p | 6.0 | 3.1 | 7.8 |
| CAPITAL AND RENTAL INCOME (a) | | | |
| Capital and rental income <75p | 90.5 | 91.1 | 82.5 |
| Cap. and rental income betw. 75p and 90p | 2.8 | 6.9 | 14.1 |
| Cap. And rental income >90p | 6.7 | 2.1 | 3.4 |
| AGE OF FAMILY HEAD | | | |
| Under 35 | 32.3 | 35.4 | 34.0 |
| 35-55 | 50.2 | 50.4 | 49.8 |
| Over 55 | 17.5 | 14.2 | 16.2 |

a. 25p, 50p, 75p and 90p indicate, respectively, the 25th, 50th, 75th and 90th precentiles of the distribution of the variable analysed for the whole population.

growth of private consumption. However, the available data for Q3 seem to point to a recovery in consumer demand. Business investment showed notable growth (12.1%) in Q2, buoyed by positive corporate earnings figures and favourable financing conditions. The current account deficit continued to deteriorate, owing to strong import growth, to stand at 5.7% in Q2. Meanwhile, the budget deficit could be 3.6% of GDP at the end of the fiscal year, despite the positive behaviour of revenues attributable, in turn, to the strong economic growth.

The risk scenarios facing the US economy are: a sudden correction to the dollar and long-term interest rates, prompted by the magnitude of the external and budget imbalances; a sharp fall in domestic demand, in response to hesitant employment growth and the high level of household debt; and an unexpected deterioration in inflation that changes the expected pattern of gradual official interest rate rises. However, there are no signs that any of these scenarios has a significant probability of materialising in the short term.

In *Japan,* GDP growth in 2004 Q1 continued to accelerate, reaching 5.9% year-on-year. This growth was based on the positive trend in investment, private consumption and exports. Subsequently, in Q2, output growth fell to 4.2%, owing to the negative contribution of investment. In any case, despite the slowdown, the growth prospects for the year as a whole remained positive, with expected growth of 4.2%.

In *China,* the rate of activity was very high; GDP grew by 9.6% year-on-year in Q2, as against 9.9% in the previous quarters. Although the July industrial production and imports data indicated a further moderate cooling, the rate of activity is still above potential, against a background in which consumer price inflation has risen to 5.3%, from 3.2% at the beginning of the year.

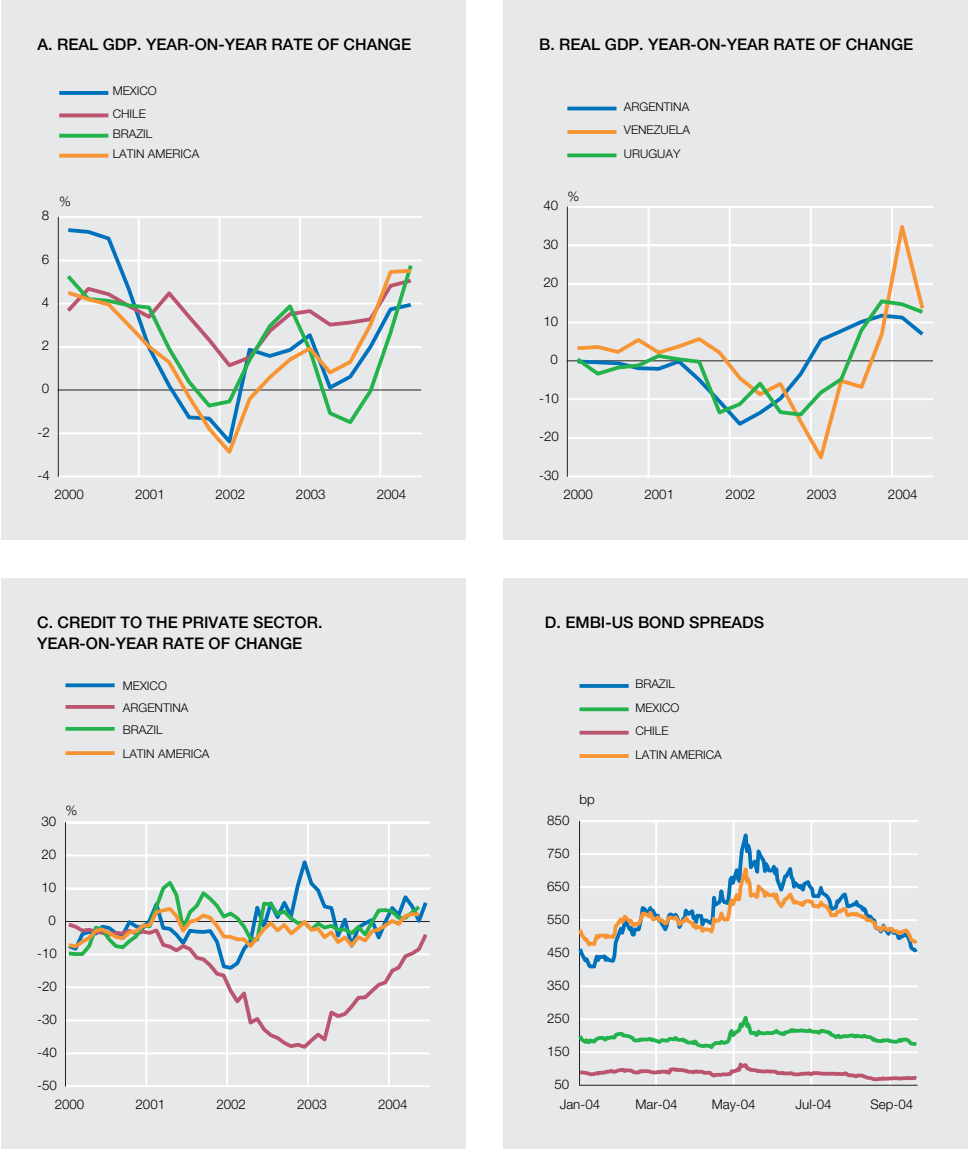
In *Latin America,* economic activity accelerated sharply in the first half of 2004 (Chart I.10A and B). GDP grew by 5.5% (year-on-year) in Q2, the same rate as in Q1. This positive performance was a result of the tendency for the year-on-year growth rates of those countries whose activity had rebounded strongly in previous quarters, following their respective economic crises (Venezuela, Argentina and Uruguay), to normalise and of the fact that growth rates in the other countries were sustained or increased slightly. There was thus a narrowing of the dispersion of growth rates, which in all cases exceeded 3.5%. The momentum of the recovery in Brazil is particularly notable, with year-on-year growth rising from practically nil at end-2003 to 5.7% in Q2.

A notable aspect of recent economic developments was the strength of domestic demand, across all of its components, following a long period of slackness caused by the economic adjustment arising from past financial turbulences. The lesser importance of external demand was attributable to the recovery in imports, since exports remained vigorous, in line with the world expansion and, linked to the latter, with the sound behaviour of commodity prices.

Inflation moved down and then up again; after breaking through the 5% floor in the first quarter for the area as a whole, inflation subsequently bounced back vigorously to above 6% in July. The gradual firming of domestic demand and the deterioration in inflation expectations led to a general tightening of monetary policies, especially from Q3, while fiscal policies were relaxed somewhat.

In Q2, in the region as a whole, bank *credit* to the private sector grew at positive real rates (Chart I.10C), largely due to the positive growth in Brazil (above 4%) and Mexico (above 5%),

ACTIVITY, CREDIT AND RISK IN LATIN AMERICA CHART I.10




SOURCES: Central banks, IFS service of the IMF, JP Morgan-Chase and BE calculation.

in parallel with the greater buoyancy of economic activity. The stabilisation in Argentina, following the collapse of credit in the wake of the crisis, also contributed to this overall improvement.

Following a prolonged period during which *sovereign spreads* had been narrowing, the first half of 2004 saw two bouts of instability that momentarily interrupted this process (Chart I.10D). The first occurred in mid-January and was moderate and temporary. Subsequently, in mid-April, at the time of the upward revision in market expectations regarding rises in official US interest rates, investors reacted by unwinding positions in the debt markets of emerging economies.

Specifically, for Latin America as a whole, the deterioration meant that the regional spread reached 700 bp in May, almost 230 bp above the low recorded in mid-January. Brazil and Colombia were the most affected countries; their spreads widened by around 60%, owing to the deterioration in their fiscal situation. However, the turbulence was temporary and from late May sovereign spreads in Latin American countries narrowed notably.

Despite the improvement in economic activity, rating agencies were cautious about raising sovereign *credit ratings.* Among the countries classified as "investment grade", Chile's rating was raised. As regards the rest of the countries, only Peru's rating was raised and the Dominican Republic's was lowered. In Q3, however, the improved climate on emerging financial markets led to upward revisions in the ratings of Brazil, Venezuela and Uruguay.

### I.2.2 IMPACT OF INSTITUTIONS' CREDIT POLICY

The acceleration in financing to the resident private sector since the last edition of the FSR is attributable to non-mortgage financing (Chart I.11A). However, the growth rate of mortgage credit was higher than that of other instruments, although it has stabilised over the last year and a half (21.1% in June 2004). Among other instruments, the acquisition of fixed-income securities recorded higher growth (59.2%), but its relative weight in total financing is low (3.5% in June 2004). Trade credit, personal loans and credit accounts also accelerated during 2004. An analysis of the possible uses of mortgage credit is presented in Box I.2.

#### Credit growth

Credit for house purchase slowed in 2004 Q2 (to 17.1%), following the strong acceleration around the end of 2003 and the beginning of 2004. Even so, it continued to grow much faster than credit for consumption (Chart I.11B). In June 2004 the growth rates of credit for house purchase, for productive activities and total credit practically converged. As already discussed in the introductory section, the growth of credit to firms is strongly influenced by the *property sector.* In the last two years the growth of credit to property developers has risen from 20% to 45%. A not inconsiderable number of institutions have seen their portfolios of loans to developers increase very significantly in a short space of time (Table I.2). For example, in just two years, 72 institutions with a relative weight, in terms of total credit, of around 40%, at least doubled their portfolio of loans to the property sector; of these, 26 at least tripled their portfolio and 15 increased it more than fivefold. Previous editions of the FSR have highlighted the high credit risk displayed by this sector in periods of slower economic growth and, therefore, the need to tighten up the acceptance, selection and monitoring of borrowers.

#### Asset securitisation

The absolute amounts of (mortgage and other) assets securitised by deposit institutions have continued to increase substantially in 2004. The amount of covered bonds (cédulas hipotecarias) also increased substantially in Q1, but declined slightly in Q2. This is the first reduction in two years, a period characterised by strong growth, in which commercial banks multiplied their stock of covered bonds almost fivefold (to €30 billion) while savings banks, which are more familiar with this product, doubled theirs (to about €22 billion).

In relative terms, total securitised assets and covered bonds represent 11.7% of lending to the resident private sector, almost twice their relative weight two years earlier (Chart I.12A). Mortgages predominate among the assets securitised, owing to the limited securitisation of other assets by savings banks. In the case of commercial banks, mortgages and other assets have a similar weight.

Naturally, a sustained increase in asset securitisation will eventually affect the measurement of credit growth. If we add the amount of securitisation by instrument to the credit to the private resident sector on the balance sheet then, as at the end of the period, the rate of growth of total credit rises by some two percentage points and that of mortgage credit by around three points, while in the case of other credit there is virtually no impact (Chart I.12B). Although the levels of the growth rates are higher, the trends are similar[10].

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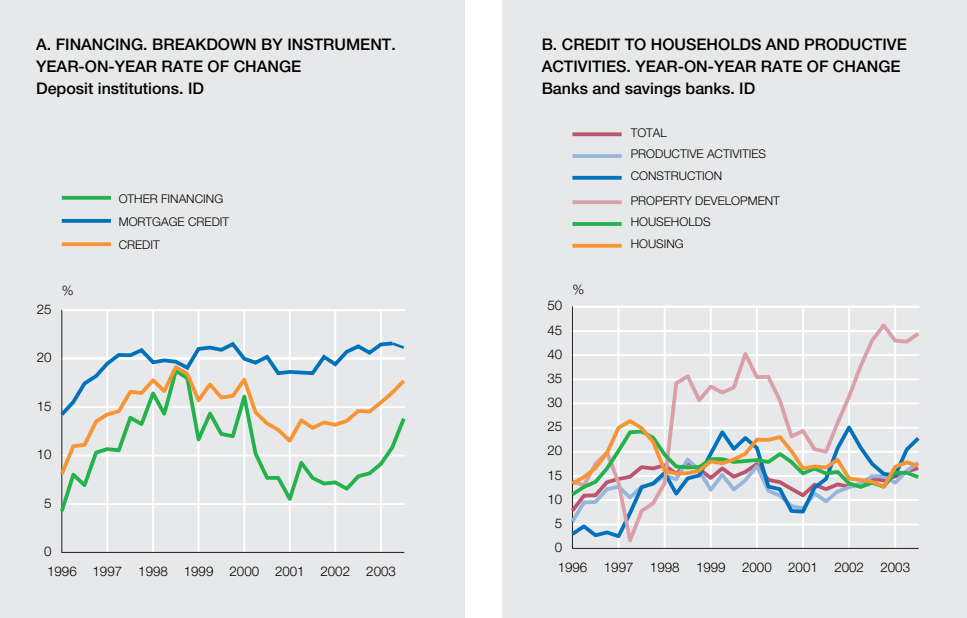
**10.** As mentioned in the last edition of the FSR, the new accounting standards are not going to permit the removal of securitised assets from balance sheets unless there is a substantial transfer of risk.

## FINANCING TO THE RESIDENT PRIVATE SECTOR

CHART I.11




SOURCE: Banco de España.

## GROWTH OF FINANCING TO PROPERTY DEVELOPERS

TABLE I.2

| | NUMBER | WEIGHT IN CREDIT TO RESIDENT PRIVATE SECTOR | WEIGHT IN CREDIT TO PROPERTY DEVELOPMENT |
|---|---|---|---|
| **Institutions without operations in the period** | **69** | **1.3** | |
| **Institutions not operating in 2002** | **13** | **0.7** | **3.0** |
| **Institutions whose growth rate between June 2002 and June 2004 was:** | | | |
| – Negative | 47 | 4.3 | 0.8 |
| – 0-50% | 37 | 8.0 | 4.2 |
| – 50-75% | 19 | 39.5 | 39.1 |
| – 75-100% | 9 | 8.2 | 9.2 |
| – 100-200% | 46 | 25.1 | 24.4 |
| – 200-300% | 6 | 5.8 | 7.3 |
| – 300-400% | 5 | 4.1 | 7.3 |
| – Over 400% | 15 | 3.2 | 4.8 |

SOURCE: Banco de España.

Risk profile of the credit portfolio

Between June 2003 and June 2004, the risk profile of Spanish deposit institutions declined. The reduction was greatest in the case of commercial banks (from 0.4% to 0.38%), although savings banks had a lower level (0.34% in June 2004). This reduction (Chart I.13A and B) basically stems from the decline in the relative weight of medium-high risk assets (unsecured credit to firms) in favour of medium-low risk assets (credit with non-mortgage collateral, with the amount financed being less than 80% of the appraisal value). It should be pointed out that there is a substantial difference in quality between these two types of collateral, in terms of the incentives to comply with the loan obligations and of the amounts recovered in the event of default.

## USES OF MORTGAGE CREDIT TO THE PRIVATE SECTOR AND THEIR POTENTIAL REPERCUSSIONS

BOX I.2

Mortgage credit granted by deposit institutions to the non-financial private sector consists of mortgage-secured credit granted to households and non-financial corporations not only for the purchase of housing and real estate but also for any other use.

The relative importance of mortgage credit not linked to property transactions is relevant from the viewpoint of financial stability, because this type of credit strengthens the relationship between changes in property prices and the spending and borrowing decisions of households and non-financial corporations. As a result, its growth may affect the situation of these sectors and, thus, that of the supplier of this financing, i.e. the banking system. For example, the co-existence of excessively buoyant house prices with a relatively aggressive lending policy, on the part of credit institutions, may stimulate the use of mortgage credit to finance consumption that otherwise would not have taken place. In such circumstances, a downward adjustment to property prices may have stronger macroeconomic effects and may affect the financial position of households and firms which, in the expansionary phase of the cycle, encouraged by the higher value of their property wealth, borrowed excessively, when they would not otherwise have done so.

In some countries, such as the United States and the United Kingdom, the financing of consumption through mortgage-secured loans, on which there is ample information, has been highly relevant, not only to explain the growth of this type of credit, but also to sustain consumption during economic downturns. However, in the euro area, there are as yet no harmonised statistics to enable the different uses of mortgage credit to be analysed. In fact, it is only possible to analyse the total volume of credit linked to the property sector, more specifically, credit for house purchase, with or without mortgage security[1].

In Spain, institutions only supply information on credit to households for house purchase, with or without mortgage security, and on the credit granted to non-financial corporations in the construction and property development sectors which, it is generally assumed, is all invested in the property sector. Accordingly, it is not possible, with the information available, to obtain the volume of mortgage credit granted by institutions to finance non-property related activities. In the case of households, any mortgage credit used for purposes other than the purchase and renovation of dwellings is included in consumer credit or *other loans,* in accordance with the classification established in current accounting regulations.

Mortgage credit for non-property-related uses is one of the main ways owners of real property can mobilise such wealth to finance their current spending without needing to carry out transactions in the property market (mortgage equity withdrawal). The financing of consumption by mortgage credit has advantages both for borrowers and lenders; the existence of security involves a lower cost for borrowers and a lower credit and capital consumption risk for lenders.

The use of mortgage credit for uses other than the acquisition of property has, in some countries and in certain periods, been constrained by legal rules regarding the creation and transmission of mortgages and their tax treatment. Currently, in most EU countries it is possible to use mortgage credit to finance spending not related to the property market[2]. However, only in the United Kingdom and in the Netherlands is it possible to quantify the relative importance of this practice[3].

In Spain, the overall ratio between credit granted to households for house purchase and households' net investment in property would suggest that the mortgage credit used to finance consumption has, up until now, not been very significant[4]. Notwithstanding this, the supply by Spanish deposit institutions of products, essentially of two types, that permit this type of financing is becoming progressively more important. In some cases, the products offered enable credit to be obtained, with the borrower's habitual residence as collateral, for up to 80% of its value (in some cases subject to an absolute limit of €150,000) to finance any need other than the purchase of housing, with terms of 10-15 years and with a choice of interest rate conditions. In other cases, institutions offer products that enable the *repaid portion* of a mortgage loan originally granted for house purchase to be used to finance other kinds of spending, albeit with limits on terms and drawdowns in some cases. Although the relative importance of this type of practice has not yet been very great, there are signs that it has risen in recent years, so that developments should be monitored.

**1.** See Regulation (EC) No 2423/2001 of the European Central Bank of 22 November 2001.

**2.** ECB (2003), Structural Factors in the EU Housing Markets and European Mortgage Federation (2002), Efficiency of Mortgage Collateral in the European Union. **3.** Bank of England (2001), "Mortgage Equity Withdrawal and Consumption". Quarterly Bulletin, Spring and De Nederlandsche Bank (2003), "Financial Behaviour of Dutch Households", Quarterly Bulletin, September. **4.** Banco de España (2003). "¿Aprovechan los hogares la revalorización de su riqueza inmobiliaria para financiar un aumento del consumo?". Boletín Económico, March.

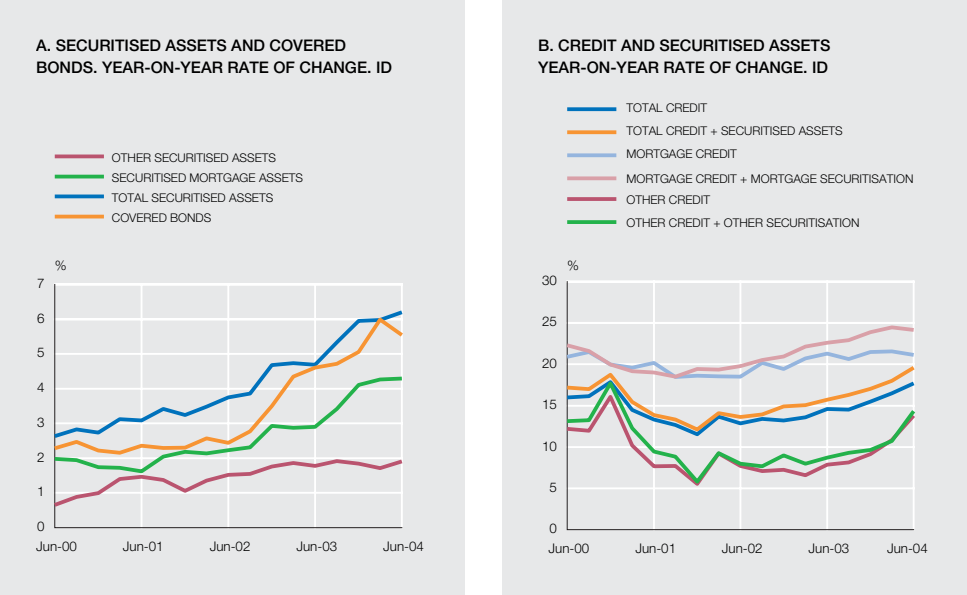
There is a very significant negative relationship between the rate of change of GDP (the cyclical position of the economy) and the probability of collateral being required for a loan to a firm[11]. In other words, during economic upturns institutions reduce their collateral requirements while they increase them in less favourable times. The change in the risk profile over the past year, at least in the case of lending to firms, shows that they are increasing the number of secured

**11.** A more detailed analysis can be found in the forthcoming Banco de España Working Paper by G. Jiménez, V. Salas and J. Saurina (2004): "Determinants of collateral".

SECURITISATION OF ASSETS

CHART I.12

Deposit institutions




SOURCE: Banco de España.

transactions. From a longer time perspective (Chart I.13C) one sees an acceleration in the relative weight of secured transactions during economic downturns and a slowdown, or even fall, in this relative weight during upturns (the correlation coefficient between the change in GDP and the percentage of secured transactions is -0.64, significant at the 1% level).

Doubtful assets

The absolute value of total doubtful assets of the individual institutions continued to decline. Not only did doubtful assets vis-à-vis the non-resident sector and credit institutions decline, but also the doubtful assets of the resident private sector, which account for around 85% of the total doubtful assets of deposit institutions, declined slightly (Chart I.14A and B), against a background of significant growth in economic activity in Spain and low interest rates.

The breakdown of the growth of doubtful assets of the resident private sector, between firms and households and the various segments within these two categories (Chart I.14C), shows that doubtful assets are only increasing significantly in the construction and property development and hotels and restaurants sectors. This growth has not affected the doubtful assets ratios since the growth in credit to these sectors was higher.

The distribution of the doubtful assets ratio of the resident private sector continued to improve, showing that the decline in doubtful assets (and also the growth in credit) has been widespread among Spanish deposit institutions (Chart I.14D). Although 101 institutions have a doubtful assets ratio of more than 1%, their relative weight in credit to the resident private sector is very low (10.8%), which reinforces the stability of the Spanish banking system.

The growth of bank credit and economic activity are closely and positively related to one another; in other words, the financing extended by deposit institutions is procyclical. However, there are also theoretical arguments (disaster myopia, herding behaviour, agency problems, the institutional memory hypothesis) why bank lending may be excessively procyclical. Such behaviour, characterised by a relaxation of the institutions' lending policy standards (acceptance, concession, risk monitoring and transaction conditions, including the term, collateral and risk premium) in economic upturns, gives rise to very low doubtful assets ratios in such

RISK PROFILE CHART I.13

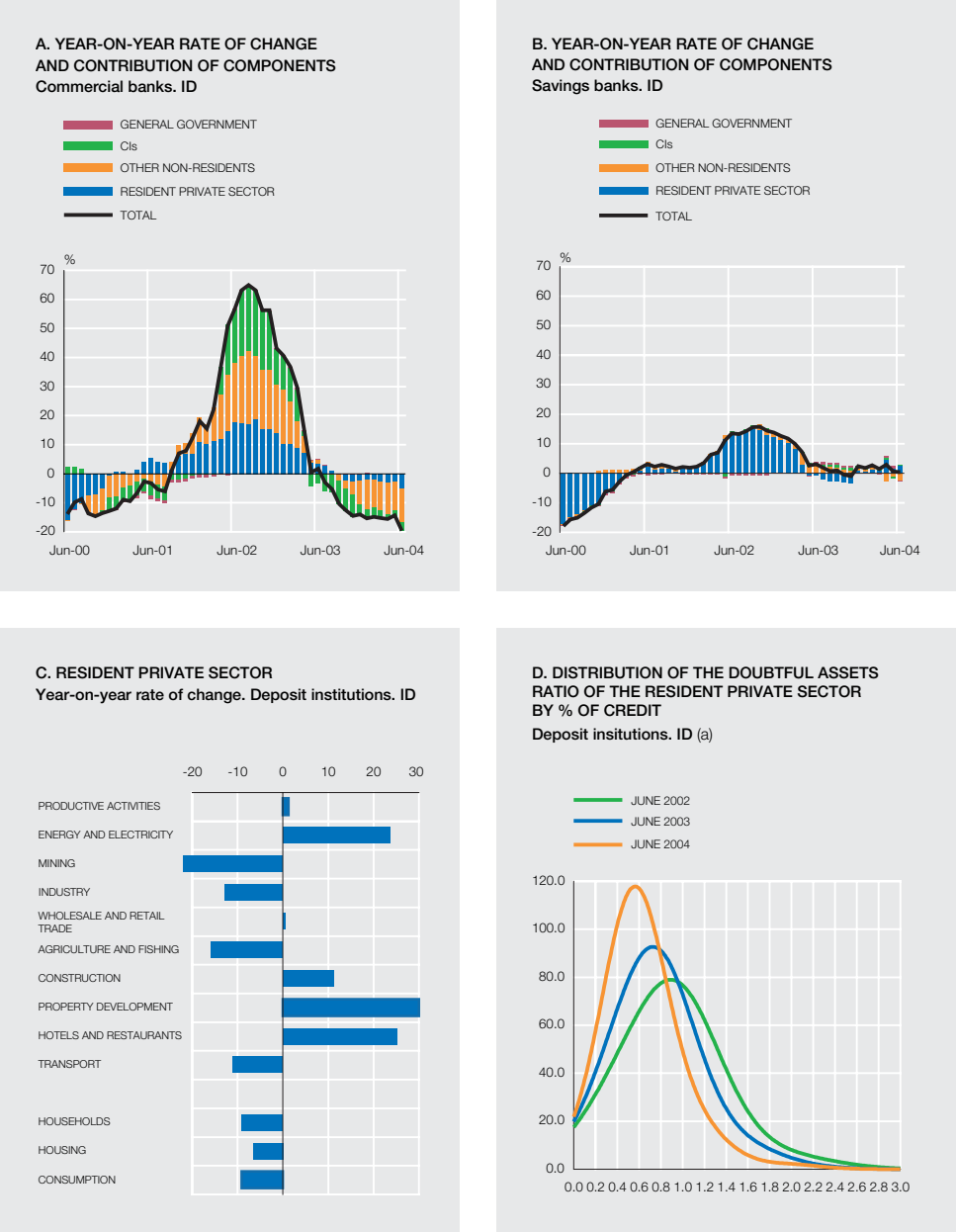

SOURCES: Banco de España and INE.

phases which, when the cycle turns, rise considerably, highlighting the errors in the lending policy during the upturn. These errors may remain latent for a long period. If very marked, these procyclical elements in lending are one of the greatest threats to the stability of a financial system.

In Spain, there is empirical evidence that a deterioration in the lending policy of institutions, after a long lag, eventually translates into an increase in doubtful assets ratios. In fact, there is a very significant positive relationship between credit growth today and the doubtful assets ratio four years later[12]. This evidence not only corroborates the theoretical arguments for the procyclicality of credit but also forms the basis for a banking regulation policy incorporating countercyclical elements, for example, through bad-debt provisioning.

**12.** A more detailed analysis can be found in the unpublished paper by G. Jiménez and J. Saurina (2004): "Credit cycles, credit risk, and prudential regulation".

DOUBTFUL ASSETS CHART I.14



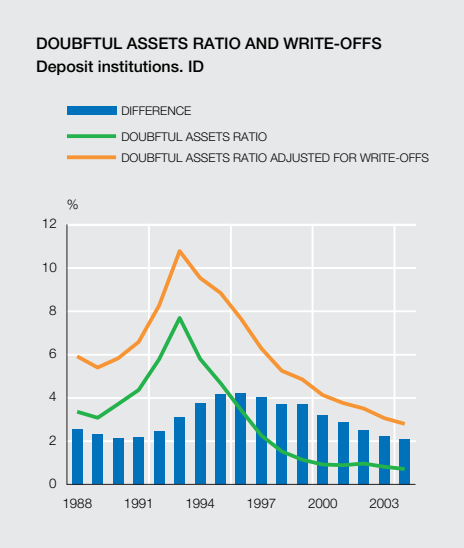

SOURCE: Banco de España.

a. Both in this case and in the rest of the FSR, the density function is approximated by means of a kernel estimator.

Write-offs

Spanish accounting standards require doubtful assets to be written off after three years (six, if they are secured by a mortgage) from the default event. Such assets are fully provisioned; that is to say, they have been fully written down against the profit and loss account. When they are written off they are recorded in memorandum accounts under the heading write-offs. The amount of this item diminishes if the amount owed is recovered (such amount being credited to the profit and loss account), if fixed assets are transferred to the institution in payment for the outstanding debt or if the debt is forgiven or the claim expires. If we add write-offs to the doubtful assets on the balance sheet we obtain a measure of total impaired assets, whether or not fully provisioned. When this amount is divided by total lending plus write-offs the result can be interpreted as a limit for the ratio of losses due to credit risk (losses that may go back many years). Such limit is between 2 and 4 pp higher than the doubtful assets ratio,

DOUBTFUL ASSETS AND WRITE-OFFS CHART I.15




SOURCE: Banco de España.

depending on the period (Chart I.15). However, the cyclical profile is practically unchanged[13].

## *I.3 Liquidity risk*

MARKETS

The negative trend in liquidity in European electronic *debt* trading systems was noted in the last edition of the FSR and has continued since. The quantitative expression of this worsening of liquidity is the weakness of the volumes traded in the MTS and SENAF[14] electronic systems.

An exceptional incident at the beginning of August also tested the liquidity and functioning of electronic debt markets in Europe. Two massive order batches entered in different markets by one of the world's largest banks, the first one consisting of instructions to sell and the subsequent one of purchase orders, exhausted the liquidity available on the market at that moment. Following the execution within the space of one minute of sales amounting to around €11 billion, of which €455 million corresponded to Spanish bonds, the bank repurchased bonds an hour later for around €4 billion.

This incident is being analysed from various angles. The regulators concerned have commenced investigations into the background to the matter. From the viewpoint of financial stability, the incident has two aspects: on one hand, the depth displayed by the market at a particularly unfavourable time of year seems positive; however, the low level of dealing that coexists with this depth calls its quality into question. In this respect, regulators and issuers are conscious of the possibilities offered by electronic technology, not only to orchestrate a large-scale operation like the one described, but also to manage the probability of execution of orders entered into the system.

On the Spanish *stock market,* the increase in the depth of the IBEX 35, measured in terms of the Kyle lambda (a parameter determined by the average amount of cash necessary to move

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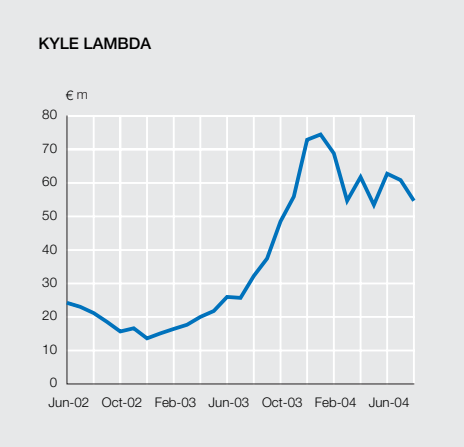
**13.** If we add fixed assets arising from adjudications and recoveries to the aforesaid ratio, the amount would be practically the same, at least since 1999, the first date for which this latter item is available. **14.** Note that it is this perspective (not one based on the prevailing purchase-sale spreads) that enables the liquidity on markets like those mentioned, in which members are bound to quote purchase and sale positions within predetermined price ranges, to be better assessed.

LIQUIDITY INDICATORS CHART I.16




SOURCE: Sociedad de Bolsas.

the price of a security or an index by 1%) confirms, over a medium-term perspective, the positive trend in liquidity that was identified in terms of traded volumes in previous editions of the FSR (Chart I.16). However, the average ranges of the three securities with the highest capitalisation on the Spanish market have continued to hold steady.

On the *foreign exchange market* one of the most significant events in relation to liquidity was the growing expansion of prime brokerage, a service provided by a wholesale institution to customers who pass to the former the processing of the orders they wish to place on the wholesale market. For example, the electronic foreign exchange broker EBS has extended its EBS Prime services to hedge funds.

INSTITUTIONS

To analyse the liquidity of deposit institutions requires details of the residual maturities of the assets and liabilities. Classifying the assets and liabilities by residual maturity enables liquidity mismatches to be approximated by term. This is only an approximation because it is difficult to know the real residual maturity of certain significant types of assets and liabilities. This is the case of sight deposits (current and savings accounts), which can in theory be translated into an immediate demand for liquidity, although their average balances usually have a high degree of permanence. The early repayment of loans may also distort their average residual maturity.

The structure of the assets and liabilities of Spanish deposit institutions, during the past five years (Chart I.17A and B), shows the preponderance, as to be expected, of the most liquid assets and liabilities (up to one month) followed by transactions at over five years (or with undetermined maturity)[15]. The weight of the latter transactions has risen continuously in recent years, basically to the detriment of transactions at up to one month. As a result the average maturity of the assets[16] of commercial banks and savings banks has lengthened, by around two years since 1999 (from somewhat less than 4 years to the current 6 years). The lengthening was most pronounced in the case of credit to the resident private sector (from somewhat

**15.** Liquid assets include the following items: cash at banks, central banks, investment in credit institutions, government securities portfolios, trading books and available for sale portfolios (adjusted for unrealised capital losses). Liquid liabilities include: central banks, liabilities vis-à-vis credit institutions, tax collection accounts and, as a hypothesis, 25% of all other sight liabilities. **16.** Institutions report the average maturity of their assets but not their liabilities. To calculate the average maturity of the liabilities, it would be necessary to consider a number of hypotheses that would affect the result most significantly.

RESIDUAL MATURITIES OF BANK ASSETS AND LIABILITIES CHART I.17

Commercial banks and savings banks


SOURCE: Banco de España.

more than 5 years to 8 years) and, in particular, in secured credit (from 8 years to around 13 years).

The difference between the assets and liabilities by residual maturity (Chart I.17C), known as liquidity mismatches or gaps, shows a short position up to the term of one year that is inverted thereafter, with amounts that increase over time but are relatively small in terms of total assets[17]. Both the time structure of the mismatches and their relative amounts are within the limits of what might be expected for institutions accustomed to managing their liquidity actively[18].

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**17.** A different hypothesis for sight liabilities (e.g. considering all of them) naturally results in significantly greater short positions up to one month and long positions over five years, although the qualitative conclusions regarding the trend remain valid. In any case, to consider all sight deposits as withdrawable at a very short term is a hypothesis that seems extremely difficult to observe in reality. **18.** Note that this analysis is for all deposit institutions, without distinguishing between currencies. In particular institutions the mismatches may be more acute.

### *I.4 Market risk*

MARKETS

International financial developments, especially from April 2004, were driven by the change in market expectations regarding the amount and timing of rises in *official interest rates* in the *United States.* The evidence of a solid rate of activity, improvements in the labour market, moderate increases in inflationary pressures and a change in the tone and message of the January and March Federal Reserve statements prepared the markets for the adjustment to a tighter monetary policy.

These expectations were subsequently confirmed. The first movement in official interest rates occurred on 30 June, with an increase of 25 bp, which was followed by two further movements, in July and September, taking the Federal Funds target rate to 1.75%. Market expectations regarding official interest rates point to a very gradual further increase that would take this interest rate to 2% by the end of 2004.

The market reaction during the period to the movement in US official interest rates was very orderly and the risks of sudden adjustment associated with the high volume of carry trades between very low short-term interest rates, expected to remain at around the same level for some time, and more attractive rates on long-term or higher risk assets (both sovereign and corporate) did not materialise. Decisive in this orderly reaction were the Federal Reserve's communications policy and the high rate of activity.

In the *euro area money markets,* interest rates rose during the first half of the year from the three-month term, reflecting expectations of a moderate rise in the ECB policy interest rate towards the end of the year. However, these movements were partially reversed in Q3.

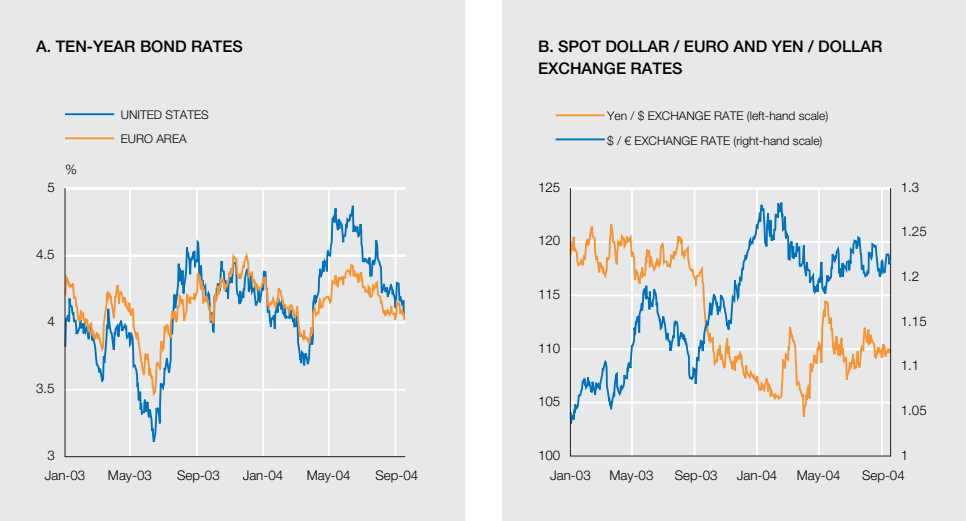
US *long-term interest rates* initially rose significantly in response to the readjustment of market expectations regarding official rates (Chart I.18A). However, this reaction was temporary and there followed a downward trend that took them to around 4%. It is important to note that bond market fluctuations, following the initial reaction referred to, were driven more by the fundamentals of prices and economic growth than by movements in official rates. Also, the behaviour of long-term interest rates differed across geographical areas, more in terms of the size of movements than their direction.

In euro area *government debt markets,* following the downward course of the first few months of the year, long-term yields rose between April and June. This movement was smaller, than in the United States, however, so the spread between their respective benchmark 10-year bonds was again positive. Subsequently, long-term rates fell again, partly reflecting uncertainty over world economic growth. In mid-September, the yield on the euro area 10-year benchmark bond was 4.08%, 22 bp lower than at end-2003.

Notable on the *foreign-exchange markets* was the stability of the dollar against the main currencies, at a level of around 1.20 dollars to the euro and 110 yen to the dollar (Chart I.18B). As is well known, the dollar did not react to factors such as the movement in short-term US interest rates, the strong increase in the level and volatility of oil prices and the further deterioration in the US external deficit. That said, the dependence of the US on the acquisition, by non-residents, of private and public fixed-income assets, continued to provide an element of risk for the dollar. This risk may be particularly serious for certain economic areas with weak economic growth, since they would face a strong appreciation of their currency, against a background of high oil prices.

*Equity* markets were relatively slack, and end-August prices were not significantly different from those at the beginning of the year (Chart I.19A). The markets seem to have consolidated

INTEREST RATES AND EXCHANGE RATES CHART I.18




SOURCE: DataStream.

the strong rise in prices in the second half of 2003. Specifically, euro area stock markets showed no definite trend during the first three quarters. Periods of rising prices were followed by bouts, linked on various occasions to oil price rises, of falling prices and higher volatilities. As at mid-September, the DJ Euro Stoxx was 3% up from end-2003, while its implied volatility was moderate. In terms of sectors, the gains in pharmaceuticals and financial services (20.7% and 18%, respectively) were notable. In contrast, the technology and cyclical consumption sectors showed losses of 16% and 7.5%, respectively.

As regards *Spanish stock exchanges,* the IBEX 35 rose by 4.9%. The largest rises were in the market services sector (22.5%) and in investment and intermediate goods (19.5%), while the financial services index fell by 3.5%. This price behaviour, along with the behaviour of company earnings, meant that movements in PER ratios were small, so that they remained somewhat higher than their historical average values on the main stock markets (Chart I.19B).

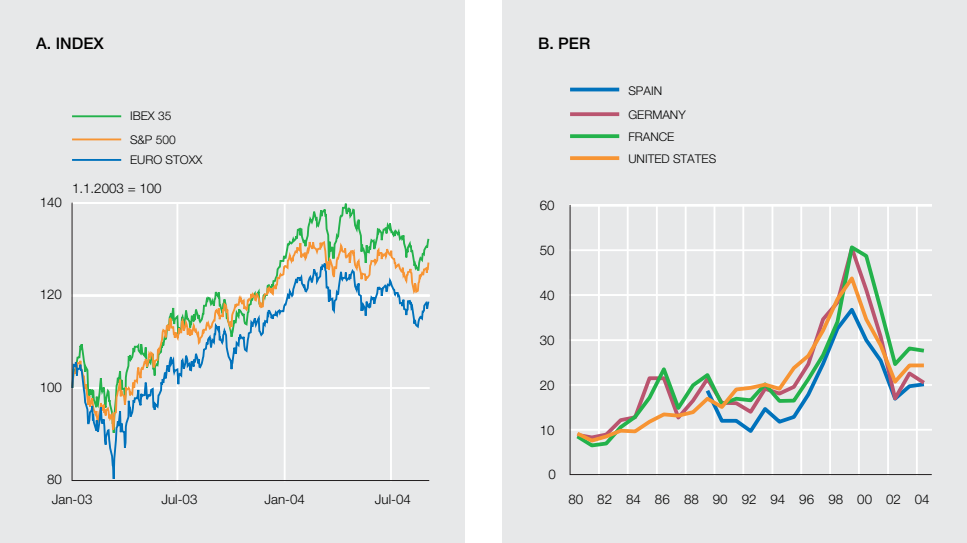
In short, as indicated in the last edition of the FSR, and even though the probability does not seem high, the main risk for international financial developments is that a change in market perceptions regarding the path of official US interest rates could lead to a disorderly depreciation of the dollar, a rise in long-term interest rates, or a combination of these two effects.

LATIN AMERICA

In Latin America, in the first half of 2004, *stock market* developments were somewhat more positive than in the developed countries and in other emerging countries, although they bore little relation to the strong rises seen in the second half of 2003. Taking a regional index as reference, stock markets in the first half, following significant fluctuations in April and May, fell by 3.5% overall. That said, there were substantial differences across countries. Markets rose in Mexico by 15%, while they fell in Brazil and Argentina. Since the middle of the year, developments have been more positive, with widespread gains. As at end-September, with the exception of Argentina (affected by debt restructuring), all the countries showed gains on the beginning of the year and the regional index was 10% higher (Chart I.20.A).

On *foreign exchange markets,* developments in the main Latin American currencies relative to the euro during 2004 can be divided into three periods (Chart I.20B): the first, to April saw a slight appreciation; the second, from mid-April to end-June, saw depreciations almost across the board; and the third saw appreciation of almost all the currencies (the Argentine peso and

STOCK-MARKET INDICES AND PERs CHART I.19




SOURCES: DataStream, Morgan Stanley and Banco de España.

the Mexican peso were the exceptions as they held unchanged). These three periods coincided with the changes in bond markets in the developed countries in response to the change in expectations regarding rises in US interest rates. Meanwhile, Venezuela devalued the bolivar by 20% in February, after which this currency held steady.

The financial instability of mid-April, associated with the ups and downs of developed markets, was reflected in a fall in *sovereign issuance* on the primary debt market. In 2004 Q1, at 11 billion dollars, the level of issuance was similar to that in the same period of 2003, but in Q2 it was only 6.8 billion dollars, which was less than a year earlier. From June, however, the market picked up again and this improvement was confirmed by the figures for issuance in Q3.

In any event, the weight of Latin America in the total issuance of emerging countries has been falling progressively in 2004, not only in the bond market, but also in equity and syndicated loan markets. At the country level, the issuance on the primary debt market of Mexico (more than 40% of the total) and Brazil (more than 30%) were notable.

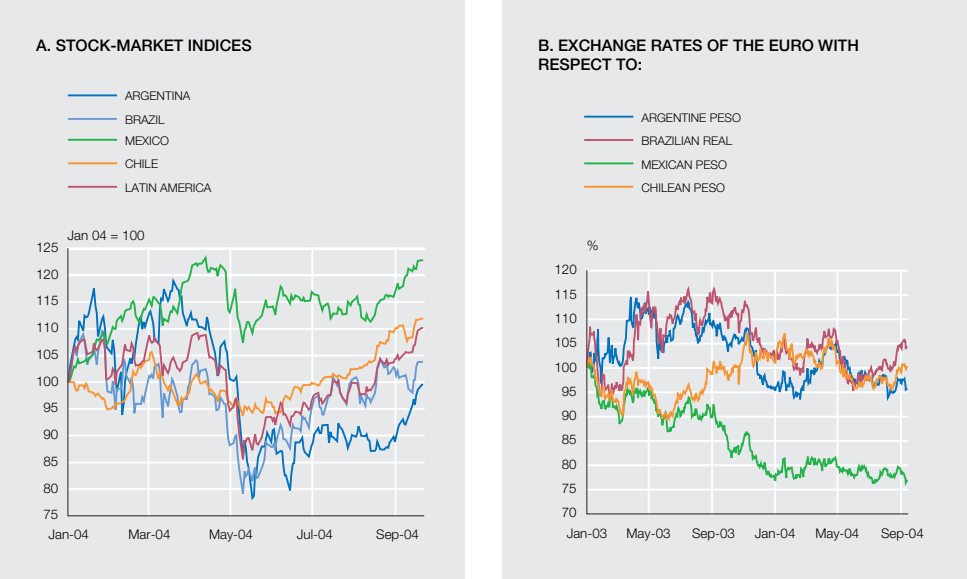
It is important to point out that, at least during the first half of 2004, the improvement in the financial situation and outlook was not reflected in a recovery of *foreign direct investment.* Flows remained steady in Brazil, at around 10 billion dollars per annum, while the upturn in Mexico during the first half (10.3 billion dollars) stemmed from a one-off transaction.

INSTITUTIONS
INTEREST RATE RISK

Current law establishes specific minimum capital requirements for the *interest rate risk* associated with the *trading book.* These requirements can be calculated by means of a standard risk-measurement method or by using internal models developed by the institutions, provided that such models, which must fulfil certain conditions, have been validated by the Banco de España. This latter possibility was opened up in September 2003 by CBE 3/2003.

In the public information supplied by institutions it is possible to find (daily and/or average, minimum and maximum) VaR estimates. The methods used to calculate VaRs differ from one institution to another, as does the degree to which the information is broken down. As a result, it is not easy to base comparisons between institutions on such estimates.

STOCK-MARKET INDICES AND EXCHANGE RATES IN LATIN AMERICA CHART I.20




SOURCE: DataStream.

However, according to the data published in the annual reports of larger deposit institutions, the estimated trading book VaRs (with a confidence level of 99% and a one-day horizon) represent very low percentages of the capital of institutions. On average in 2003, the trading book VaRs of large institutions did not, in general, exceed 0.2% of tier 1 capital, and in certain cases they did not even exceed 0.1%[19]. Moreover, according to the trading book VaRs published by the major Spanish deposit institutions, there was a general reduction in 2003 in the market risk associated with such portfolios.

As is well known, there are no specific minimum capital requirements associated with the *structural interest rate risk* (interest rate risk in the banking book) under current law. However, the Supervision Department of the Banco de España monitors and analyses this risk and the internal control tools available in each institution. This approach is in line with pillar II of the new capital framework announced by the Basel Committee on Banking Supervision (BCBS).

In most institutions the main tools to analyse the structural interest rate risk are analysis of the maturity gaps in their total assets and liabilities (residual maturity in the case of fixed-rate agreements and the time to the next interest-rate review in the case of floating-rate agreements) and analysis of the duration of the assets and liabilities. Institutions may also use static or dynamic simulation techniques, which enable them to assess the impact of hypothetical changes in interest rates on net interest income and on the value of the institution. However, although institutions carry out this sensitivity analysis, in most cases the results are not published[20]. Accordingly, it is difficult to make any generalisation based on the public information available.

It should be noted that the sensitivity of deposit institutions to a change in interest rates will depend not only on the interest risk assumed but also on how the credit risk is affected under

**19.** To facilitate the comparison between institutions, the VaR estimates referred to the total market risk and not only the interest rate risk of portfolios. This generally reinforces still further the conclusions regarding the low level of interest risk in the trading books of Spanish deposit institutions. **20.** Most institutions publish only their maturity and repricing matrix, not the impact on their net interest income or value of a particular change in interest rates.

the various interest-rate change scenarios. For example, a rise in interest rates not only affects the profits of an institution through maturity gaps and duration, but may also affect the financial position of its borrowers. The relative importance of these effects will depend not only on the specialisation of each institution and the magnitude of the change in rates, but also on the level of borrowers' indebtedness.

## II Profitability

### *II.1 General situation*

In the first half of 2004, deposit institutions engaged in their activity against an economic background marked by the improved outlook in the main economies and higher growth in the Latin American countries. That has made for a firming of the growth of Spanish deposit institutions' results, based on this occasion on the recovery, in absolute terms, of all margins, despite the fact that interest rate spreads have continued to narrow and that stock market prices in Q2 bore negatively on the institutions' results. The recovery includes something of a negative impact exerted by the conversion to euro - on a lesser scale than in previous half-year periods - of the amounts relating to business abroad.

The group *net income* of deposit institutions[1] accelerated by 19.6% (see Table II.1)[2], with a rise of 7 bp in terms of ATA to 0.91%. This growth in group net income, which far exceeded that of the average own funds of the group (9.2%), is what provided for an increase of 1.3 pp in the ROE of deposit institutions as a whole to 15.3% (Chart II.1A). As a result, the profitability/public debt spread has widened for the second year running to 11pp.

For deposit institutions as a whole (Chart II.1B), the change in ROE over the past year is in response[3], first, to lower provisions and write-downs, both of bad debts and of goodwill, which is reflected in a positive contribution to the ROE of the group net income/NOI ratio. Second, the improvements in the efficiency ratio have continued to contribute significantly to the increase in profitability. Both factors have been lessened by the adverse impact of the productivity of risk-weighted assets due to the fact that the growth of gross income was far below the growth of these assets. Finally, the impact of the asset risk profile, of gearing and of the quality of equity was minimal.

*Net interest income* has begun to pick up at deposit institutions following the declines in the previous half-year periods. The breakdown of the year-on-year change in this income (Chart II.2A) reveals that, as in 2002, the growth of this income[4] (6%) was based on the expansion of earning financial assets, countered by a greater volume of interest-bearing financial liabilities, and on the improvement of the spread on the liabilities side, thanks to the fall in average deposit rates. Nonetheless, both effects have been partly countered by the adverse impact of the narrowing of the interest rate spread on the asset side, owing to the stiff competition that has exerted downward pressure on rates beyond the decline in the benchmark rate (3-month euribor).

The favourable trend of net interest income also reveals a lesser impact of the year-on-year appreciation of the euro against some of the main Latin American currencies compared with

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**1.** In this and the following chapter of the FSR, foreign bank branches based in other European Union countries are not included, as this sub-group is not subject to capital requirements in Spain. The number of institutions analysed in both chapters therefore holds constant. In any event, the relative weight of the institutions excluded is very small. **2.** The profit and loss account for analytical purposes included in this chapter differs to some extent, in certain groupings of headings, from the public profit and loss account. **3.** The previous FSR (Box II.1) explained in detail the breakdown of the change in the ROE into six elements: group net income divided by net operating income (NOI), 1 minus the efficiency ratio (equivalent to net operating income divided by gross income, NOI/GI), the productivity of risk-weighted assets (GI/RWA), the risk profile of assets (RWA/A), gearing (A/(tier1+tier2) and the quality of own funds ((tier1+tier2)/equity). **4.** The change in NII, i.e. $\Delta NII = (eAt \times At - iLt \times Lt) - (pAt - 1 \times At - 1 - iLt - 1 \times Lt - 1)$, where A, L, eA and iL respectively denote earning financial assets, interest-bearing financial liabilities, the average return on earning financial assets and the average cost of interest-bearing financial liabilities, can be expressed as the sum of five effects: 1) the volume effect of assets; $eAt - 1 \times (At - At - 1)$; 2) the volume effect of liabilities, $- iLt - 1 \times (Lt - Lt - 1)$; 3) the asset differential effect, $[(eAt - ret) - ( eAt - 1 - ret - 1)] \times At$; the liabilities differential effect, $[(ret - iLt) - ( ret - 1 - iLt - 1)] \times Lt$; and 5) the euribor effect, $(ret - ret - 1) \times (At - Lt)$; where re denotes the 3-month euribor.

CONSOLIDATED PROFIT AND LOSS ACCOUNT TABLE II.1

| | JUN-03 | | JUN-04 | | |
|---|---|---|---|---|---|
| | % ATA | % CH. J.03-J.02 | € m | % ATA | % CH. J.03-J.02 |
| Financial revenue | 4.69 | –14.8 | 32,040 | 4.17 | –2.4 |
| Financial costs | 2.26 | –20.7 | 13,958 | 1.81 | –11.6 |
| **Net interest income** | **2.44** | **–8.4** | **18,082** | **2.35** | **6.0** |
| Net commissions | 0.93 | –4.1 | 7,126 | 0.93 | 9.7 |
| Result on financial transactions | 0.17 | 63.3 | 972 | 0.13 | –17.8 |
| **Gross income** | **3.53** | **–5.3** | **26,179** | **3.40** | **5.8** |
| Operating expenses | 2.04 | –6.7 | 14,680 | 1.91 | 2.9 |
| **Net operating income** | **1.50** | **–3.3** | **11,499** | **1.49** | **9.8** |
| Provisions and write-downs (net) | 0.49 | –19.8 | 3,157 | 0.41 | –8.0 |
| Profits from group transactions | 0.05 | –66.5 | 618 | 0.08 | 82.6 |
| Extraordinary income | 0.18 | 139.7 | 1,004 | 0.13 | –19.3 |
| **Profit before tax** | **1.23** | **6.8** | **9,964** | **1.30** | **15.5** |
| Net income | 0.96 | 6.3 | 7,712 | 1.00 | 14.9 |
| | | | | | |
| MEMORANDUM ITEM | | | | | |
| Group net income | 0.83 | 9.4 | 6,963 | 0.91 | 19.6 |
| ATA | 100 | 1.5 | 1,538,369 | 100 | 9.9 |

SOURCE: Banco de España.

previous periods. This is seen in the growth of net interest income in business abroad (5%) for the first time in recent years, which has been driven by the improvement in the total spread (16 bp).

*Commission income* grew once again following the declines in absolute terms in the past two years (Chart II.2B). This is the outcome, first, of the strong expansion of commissions associated with the sale of non-bank financial products, linked to the recovery in the net asset value of managed mutual funds and, to a lesser extent, to the greater distribution of insurance; and second, of the pick-up in commissions for collection and payment services (6.3%), following the decline in 2003. Also a positive influence, though of less relevance, was the turnaround in commissions associated with securities services (1.7%) and the growth of commissions associated with contingent liabilities (11.1%), in line with their behaviour in recent years.

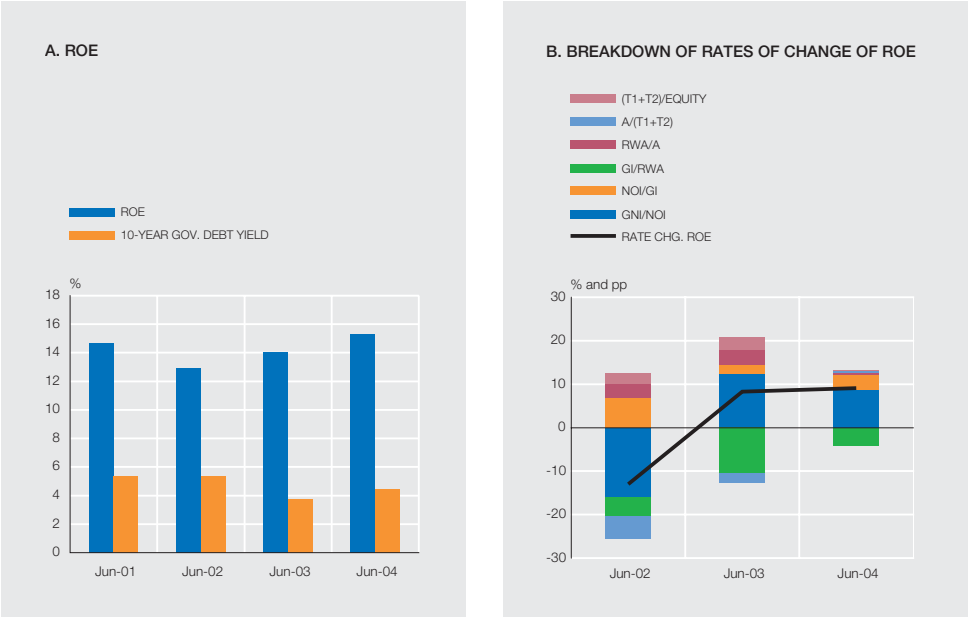
The *result on financial transactions* fell in absolute terms (17.8%), which meant a decline of 4 bp in terms of ATA. This essentially reflects the marked decline in profits on the trading book (10 bp), which is connected with the slackness of stock market prices in Q2 (Chart II.2C) and with interest rate movements. The behaviour of trading book results is in contrast to that in 2003, which largely justified the strong expansion of the result on financial transactions as at that date. The deterioration in the results for this book was largely offset by the lower losses on other futures transactions and higher income from exchange differences. Finally, profits on the available-for-sale fixed-income portfolio held relatively stable.

The declining trend of *gross income* turned around in the past two quarters (5.8%), although it grew at a lower rate than that of ATA, whereby it continued to decline in relative terms (13 bp to 3.4%).

ROE AND ITS DETERMINANTS

CHART II.1

Deposit institutions




SOURCE: Banco de España.

*Operating expenses* grew by 2.9%, owing to the increases in personnel expenses (2.8%) and in overheads and taxes (4.9%), far below the growth in activity, which provided for a fresh reduction in terms of ATA (13 bp). Depreciation, by contrast, continued to fall (3%). This moderate growth in deposit institutions' expenses, compared with that of gross income, made for an improvement in the *efficiency ratio* (Chart II.2D) of 1.6 pp (56.1%). *Net operating income* grew by 9.8%, a similar rate to that of activity, meaning this margin held virtually stable in terms of ATA.

*Provisions and write-downs* bore favourably on the profit and loss account of deposit institutions since they continued to fall in absolute terms (8%). As a result, the proportion of net operating income absorbed by this caption stood at 27%, 6 pp less than in 2001. Specifically, the fall in write-downs is attributable to the lower provisions for country risk. Bad-debt provisioning, which subtracted one-quarter from net operating income in June 2004, grew by 5.4%, despite the lesser need for provisioning of the specific fund, associated with the decline in doubtful assets, and as a result of the increase in provisioning to the general and statistical funds. Finally, net provisions to other specific funds were twice those in 2003.

*Net income on group transactions* was appreciably higher than a year earlier, thanks largely to the sizable reduction in provisions for the amortisation of goodwill, following the significant effort made in prior years by certain large institutions to accelerate its amortisation. Further, the improved results of non-financial corporations in which deposit institutions have a stake translated into higher income. Conversely, the weight of profits arising on the sale of shares in fully or proportionally consolidated entities was scant; after surging in 2003, such profits stood at a similar level to that of the previous year.

*Extraordinary income* was lower than in the same period of 2003, although its amount remained twice that in 2002. It fell by 5 bp in terms of ATA to 0.13%, owing essentially to the lower income from sales of property and of participations in the available-for-sale fixed-income portfolio.

REVENUE, EXPENSES AND EFFICIENCY

CHART II.2

Deposit institutions


SOURCE: Banco de España.

In sum, Spanish deposit institutions' results continued to grow at a high rate, entrenching the recovery mentioned in the previous editions of the FSR. On this occasion, growth was underpinned by the sound performance of the more recurrent results, as apparent in the increases in the main margins, despite the fact that interest rate spreads have continued to narrow. Moreover, the process of containment of operating expenses and of increasing efficiency has continued.

### *II.2 Analysis based on individual institutions*

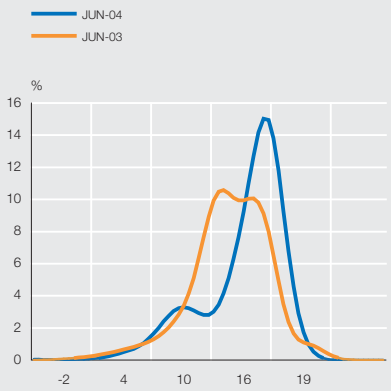
The distribution of ATA by *ROE* improved appreciably, except in the lowest percentiles (Chart II.3). Conversely, the distribution of the number of institutions shifted slightly to the left in relation to June 2003, indicating the fall in the ROE at some entities, whose profitability stands at intermediate levels. Overall, the foregoing shows that the ROE tended to improve, although it held stable at institutions with relative low ROE levels. Moreover, the improvements were most significant at the biggest institutions, while the decline in ROE affected certain small entities.

DISTRIBUTION OF PROFITABILITY

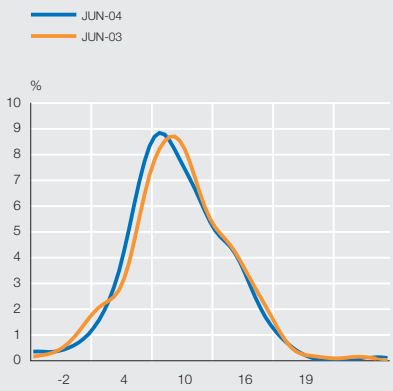
CHART II.3

Deposit institutions

A. DISTRIBUTION OF ATA ACCORDING TO ROE




B. DISTRIBUTION OF NO. OF INSTITUTIONS ACCORDING TO ROE




C. DISTRIBUTION OF ROE

| ROE BRACKETS | % ATA | No. OF INSTITUTIONS |
|---|---|---|
| <0 | 0.4 | 9 |
| 0-5 | 1.2 | 19 |
| 5-10 | 11.6 | 73 |
| 10-15 | 16.5 | 53 |
| 15-20 | 66.6 | 15 |
| >20 | 3.7 | 2 |

SOURCE: Banco de España.

Distinguishing between banks and savings banks, there are evidently certain differences in the level and, above all, in the determinants of the ROE of these two groups of institutions (Charts II.4A, B and C). Banks have a higher ROE, particularly in the latest half-year period, compared with the greater stability over time of savings banks' ROE.

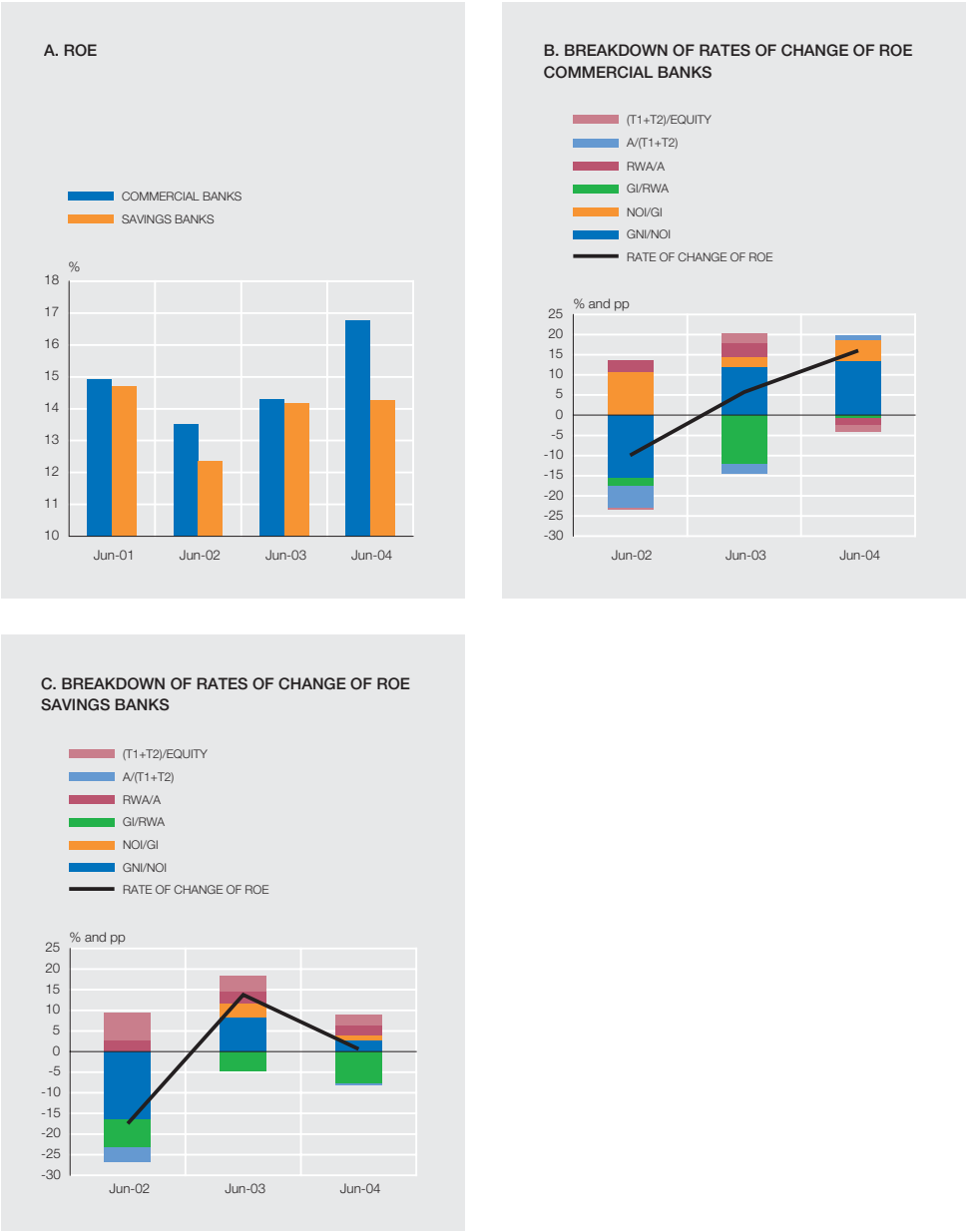
At *banks,* the breakdown of the year-on-year change in ROE shows that the increase in profitability is largely attributable to the increase in the group net income/net operating income ratio, the result in turn of the reduction in provisions for amortising goodwill and for country risk and, to a lesser extent, of the improvement in the efficiency ratio (Chart II.4B). The asset risk profile and the quality of own funds also improved, although they bore negatively and on a limited scale on profitability.

At *savings banks,* however, the same type of breakdown indicates that the low growth of gross income, translated into lower productivity of risk-weighted assets, cancelled out the improvements in profitability induced, first, by the increases in group net income and in the efficiency ratio, and second, by the growth of the asset risk profile and the slight deterioration in the quality of own funds (Chart II.4C).

The distribution of ATA according to the *efficiency ratio* improved in relation to the first half of 2003. The shift towards lower brackets of the efficiency ratio centred on relatively big institu-

**ROE AND ITS DETERMINANTS** CHART II.4

Banks and Savings Banks




SOURCE: Banco de España.

tions, while at certain small entities the efficiency ratio worsened, whereby the distribution of the number of institutions deteriorated slightly (Chart II.5A, B and C).

The last two FSRs specifically analysed the business, profitability and solvency of credit co-operatives and of foreign banks' branches in Spain, respectively. This present edition will study specialised credit institutions (Box II.1).

COMPARISON WITH EUROPEAN BANKS

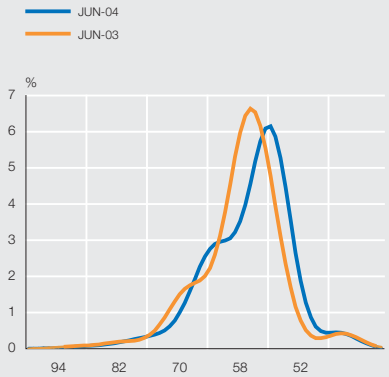
The economic and financial circumstances in which European banks operated in 2003 were somewhat more favourable than in 2002, but were not exempt from difficulties. In particular, EU GDP growth remained below 1%, although the average growth rate during 2004 has improved, fundamentally in some of the countries facing the biggest difficulties in recent years. In keeping with these prospects of recovery, the deterioration in financial position that had been affecting numerous corporations has recently abated. The stock market performance was duly

DISTRIBUTION OF THE EFFICIENCY RATIO

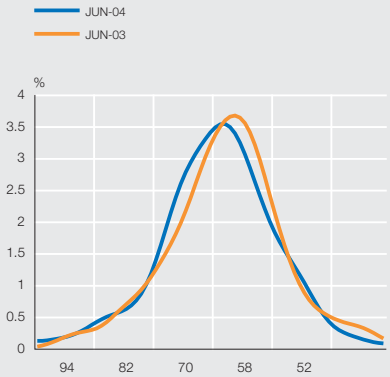
CHART II.5

Deposit institutions

A. DISTRIBUTION OF ATA ACCORDING TO THE EFFICIENCY RATIO




B. DISTRIBUTION OF THE NO. OF INSTITUTIONS ACCORDING TO THE EFFICIENCY RATIO




C. DISTRIBUTION OF THE EFFICIENCY RATIO

| BRACKETS EFFICIENCY RATIO | % ATA | No. INSTITUTIONS |
|---|---|---|
| >100 | 0.4 | 9 |
| 90-100 | 0.2 | 2 |
| 80-90 | 1.0 | 10 |
| 70-80 | 3.5 | 27 |
| 60-70 | 25.0 | 62 |
| 50-60 | 59.6 | 42 |
| 40-50 | 6.5 | 13 |
| <40 | 3.8 | 6 |

SOURCE: Banco de España.

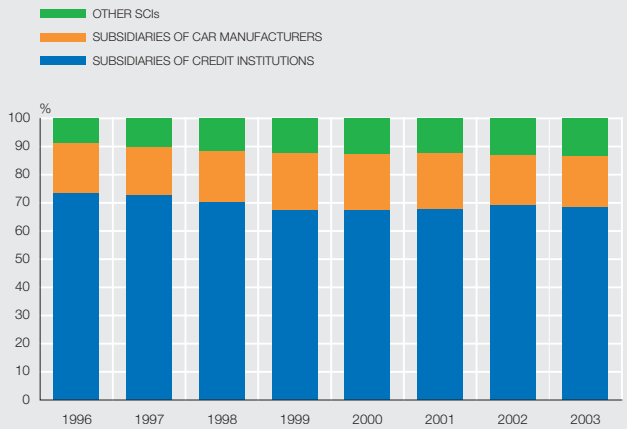
better than in previous years (the DJ Stoxx 50 index posted growth of around 10% during 2003, set against the 35% decline recorded the previous year).

Against this backdrop, the conditions for institutions whose main activities are investment banking and asset management improved slightly on 2002, but it is retail activity which is most contributing to bolstering profitability. Likewise, non-strategic asset disposals and cost rationalisation, on which institutions facing most difficulties embarked in previous years, are being reflected in their results.

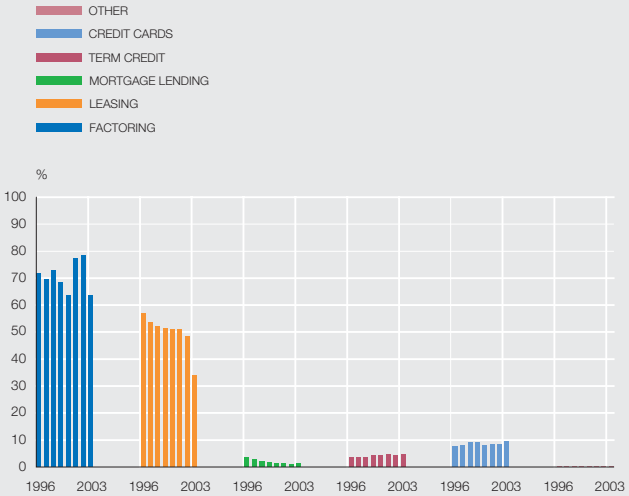
Spanish deposit institutions' results in 2003, compared with the European average, place them, as in previous years, in a relatively favourable light. In particular, both their ROA and ROE[5] were almost double the EU average. The type of operations engaged in by Spanish institutions, focusing more on the strongly growing domestic retail segment, and combined with activity in Latin America where, in general, margins are higher, explain why net interest income as a proportion of total assets[6] is around 50% higher than the European average.

**5.** ROE is defined as profit after tax as a proportion of tier 1 capital. This definition differs substantially from that used throughout the FSR. However, it allows a uniform comparison across the 15 EU countries. **6.** Note that assets are not averaged out, i.e. they are not ATA. There are, moreover, certain differences in the definitions of margins. Once again, the advantage is that what are involved are uniform cross-country data.

SHARE OF TOTAL ASSETS BY GROUP OF INSTITUTIONS CHART 1




SHARE OF SCIs IN TOTAL CREDIT INSTITUTIONS BY TYPE OF CREDIT TO THE RESIDENT PRIVATE SECTOR CHART 2




Specialised credit institutions (SCIs) are entities authorised to engage in the full range of activities pursued previously by their predecessors (bank-like institutions known as ECAOLs in Spanish), namely: leasing, mortgage lending, financing of capital goods and other buildings, and factoring, with an extension to specific activities complementary to leasing and to the issuance and management of credit cards. They are financed by own funds, by liabilities with credit institutions and by the issuance of securities maturing at over one year, it being prohibited to them to raise deposits from the general public. As a result, they do not belong to the Deposit Guarantee Funds.

SCIs in 2003 totalled 78, after an ongoing slide from 114 in 1996 which, in turn, was 57 fewer institutions than the total number of bank-like institutions (ECAOLs) operating in 1995. The most sizable group among the SCIs are the subsidiaries of credit institutions (42, 13 of which foreign institutions), with a share in total SCI assets of 69% (17% of which relating to foreign institutions). The next biggest group are the subsidiaries of car firms (11), whose share is 18%. Of the 25 remaining institutions, which include the subsidiaries of the major distribution corporations, 6 are foreign, and they account for 13% of the total assets of SCIs (Chart 1).

SCIs' activity basically involves raising funds on the interbank market and extending credit to the resident private sector. Their market share in relation to the total number of credit institutions in this sector is small (4.3%, 0.4 pp less than in 1996). However, the shares are much higher for certain types of credit (Chart 2), as is the case for factoring (64%), leasing (34%) or credit card loans (9%).

However, mortgage credit and consumer finance, despite their scant weight in the aggregate, are significant segments of the activity pursued by foreign SCIs. For the subsidiaries of foreign credit institutions, mortgage lending accounts for more than half of their lending, and two-thirds of the overall mortgage lending extended by SCIs. At the institutions that are subsidiaries of car manufacturers, consumer finance exceeds 70% of their total credit, which in turn accounts for 45% of the consumer finance for all SCIs.

This operational specialisation is, in fact, one of the main defining characteristics of SCIs' activity: 37% of these institutions concentrate more than 90% of all their credit to the resident private sector in a single activity (factoring, mortgage lending, leasing, consumer finance or credit cards), and 87% concentrate over 50%. Moreover, a high percentage of the institutions do not engage in activities such as factoring (73%), credit card management (87%), mortgage lending (65%) or leasing (63%). The result is a high level of concentration and specialisation in each of the different business segments of these institutions.

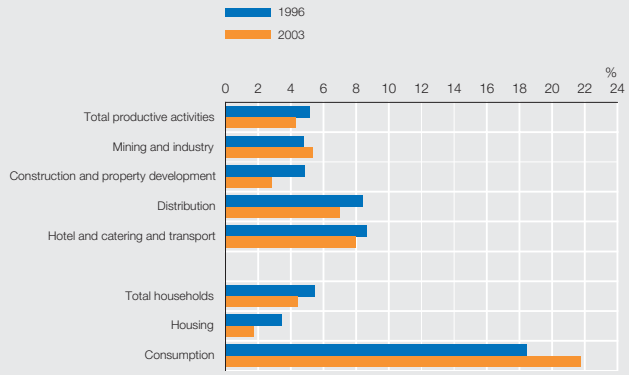
The credit extended by SCIs is distributed virtually equally between that to non-financial corporations and that to households. Yet while credit to non-financial corporations is distributed very uniformly among the different productive activities, almost two-thirds of the credit extended to households is concentrated in credit for the purchase of consumer goods. The weight of this activity of SCIs in relation to credit institutions as a whole is 21.7%, with a gain in share over the past seven years of somewhat over 3 pp. The weight of the remaining uses of credit in the system is considerably less, and has even diminished over the period in question, with the exception of that extended to mining and industry (Chart 3).

On the liabilities side, and in view of the restrictions on these institutions regarding the raising of deposits and the issuance of debt securities, the main source of financing is other credit institutions, and in the case of subsidiaries, it is their own parents.

Only at the subsidiaries of car manufacturers are liabilities with the resident private sector of some relevance, due to the fact that this caption includes the financing of the parent, which is not a credit institution.

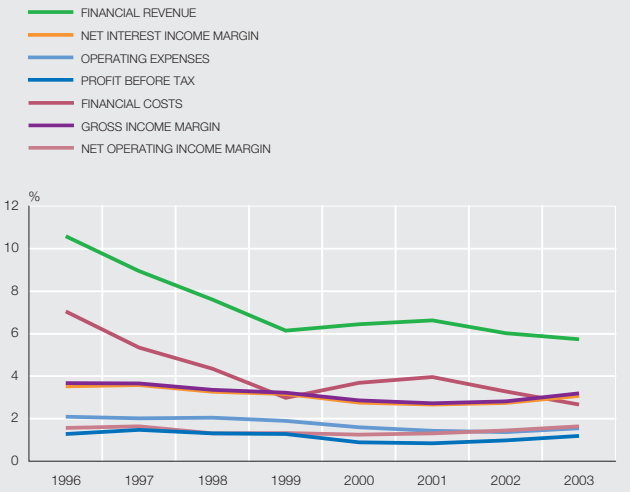
The profit and loss account of SCIs, in terms of ATA, is marked by high financial revenue and costs, which give rise to a high net interest income margin (3.1% of ATA); scant revenue on commissions and on financial transactions (0.1%); operating expenses relatively lower than

SHARE OF SCIs IN TOTAL CREDIT INSTITUTIONS BY END-USE OF CREDIT TO THE RESIDENT PRIVATE SECTOR CHART 3




PROFIT AND LOSS ACCOUNT CHART 4

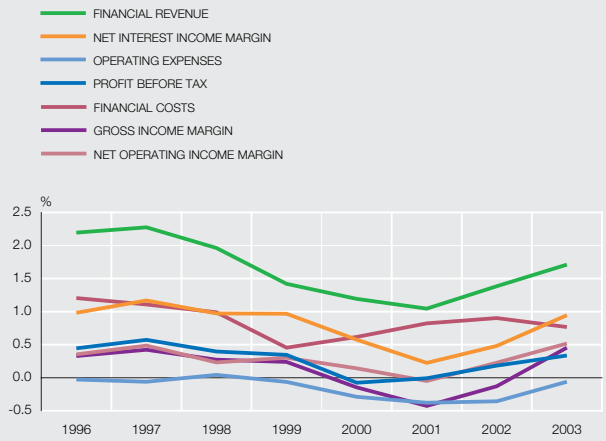
Percentage of ATA




those of other credit institutions (1.6%); and a net operating income margin and profit before tax (1.6% and 1.2%, respectively) somewhat higher, on average, than that obtained by deposit institutions (Charts 4 and 5).

PROFIT AND LOSS ACCOUNT. DIFFERENCES IN RESPECT OF DEPOSIT INSTITUTIONS CHART 5

Percentage of ATA



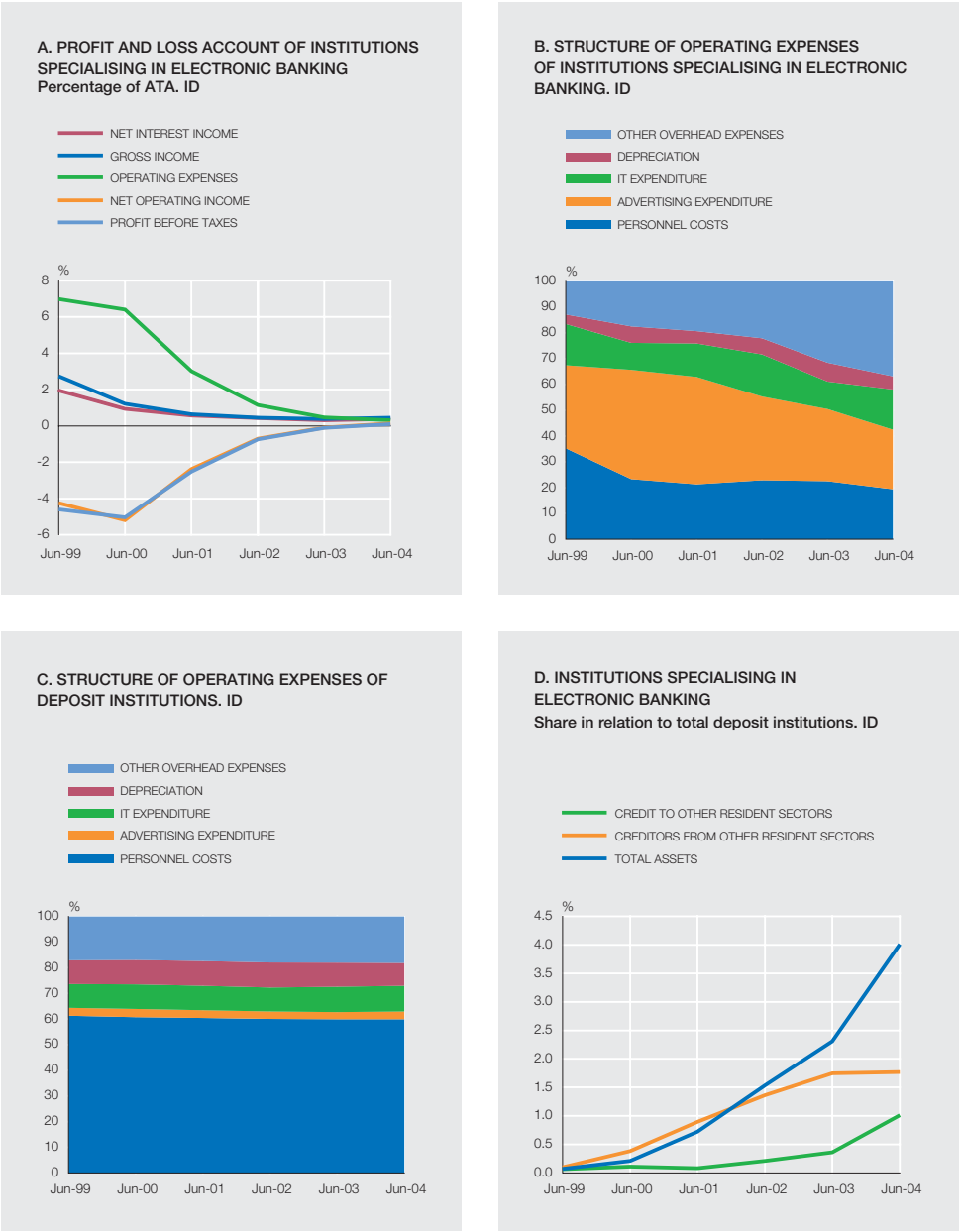

Nonetheless, the profit and loss account evidences substantial differences when we group institutions on the basis of their operational specialisation. Entities specialising in credit cards and, to a lesser extent, those dedicated to consumer finance and mortgage lending show higher margins than deposit institutions. Prominent here are those specialising in credit cards, the only ones where commissions income is of some significance. Conversely, institutions specialising in leasing or in factoring show lower returns, lower even than those of deposit institutions. In turn, the greater profitability is associated with a higher level of risk, which is manifest in higher default and loan write-downs.

Tracking the changes in the profit and loss account, the increase in margins over the past two years has been significant, with the positive differences vis-à-vis other credit institutions widening. This increase is very widespread across the different segments of specialisation, the basis for all such increases being the improvement in the net interest income margin, underpinned by the rise in the average return on assets.

Finally, the solvency ratio of SCIs currently stands at 12.2%, comfortably above the minimum level required. The ratio, which was on a declining trend until 2000, has increased slightly in the past two years. It is on an equal footing with the solvency ratio of the group of deposit institutions with a similar volume of business to that of the SCIs, whose ratio has traditionally been higher than that of the SCIs.

In recent years, Spanish institutions have striven to increase the levels of efficiency at which they operate, mindful of the importance of this in an increasingly competitive environment. Their efforts have meant that operating expenses in proportion to total assets are in line with the European average (5% greater, in contrast to 2002 when they were around 40% higher). The higher income obtained, apparent in gross income that is almost 20% greater, combined with operating expenses that are only slightly higher than the European average, have given rise to net operating income that is somewhat over 40% higher and an efficiency ratio that is also more favourable for Spanish institutions.

ELECTRONIC BANKING CHART II.6




SOURCE: Banco de España.

Finally, although the comparison in terms of default ratios is also favourable to Spanish institutions, enormous caution is required here since the definition of doubtful assets varies from country to country. For example, in some European countries doubtful assets remain on the bank balance sheet until their definitive recovery or cancellation, even though they are fully provided for. It was earlier discussed in Chapter I that this is not the case in Spain where, once three or six years have elapsed, they are removed and recorded as recoveries of written-off assets.

If the foregoing analysis is confined to the major *European credit institutions*[7], the conclusions about the relative situation of Spanish institutions are analogous. In particular, the net operating income margin is greater for the major Spanish institutions which, at the same time, oper-

7. Those whose consolidated assets exceed 0.5% of the total consolidated assets of EU credit institutions as a whole.

ate with better levels of efficiency than the big European banks on average. This is due to their higher income, seen to a greater extent in the net interest income margin than in the gross income margin, and to somewhat higher-than-average operating expenses (approximately 15%). This better relative position in terms of profitability is reflected both in the ROA and in the ROE (132% higher). As was the case for credit institutions as a whole, the foregoing was reinforced by a lower default ratio level and greater provisioning for bad debts.

In sum, throughout 2003, and as stated in the previous FSR, there was a relative improvement in the financial position of European credit institutions. In this setting, Spanish institutions performed relatively better than the average for the EU, as was also the case in 2002.

As regards 2004, market data indicate that the *stock market performance* of the main European banks was relatively stable, as was their *implied volatility.* The major Spanish banks followed a similar path.

The spreads for *credit default swaps* (CDS) also indicate that the perception of participants in the market for these products about the degree of risk of European and Spanish institutions is that it is stable and relatively low. A further indication confirming this perception is that the spread between subordinated and senior debt has held stable and at a low level throughout 2004.

Finally, there were no significant changes in the *betas* of the major Spanish banks in relation to the last FSR. They held at an intermediate position, similar to that recorded in recent years.

ELECTRONIC BANKING

Spain has seen in recent years the emergence of newly created institutions and the setting up of foreign institutions (branches of European banks) offering banking products and services mainly, though not exclusively, via telephone and, especially, the Internet (what the specialists call electronic banking). Established institutions, which mainly use branch offices as their sales outlet, have reacted by offering their customers the possibility of operating through these alternative channels as well.

Some of these electronic banking specialists have already abandoned the Spanish market or curtailed their expansion plans. Conversely, others, after several years of losses, are now showing positive, though still very low, pre-tax income (Chart II.6A). Such income is essentially based on the reduction of the average cost of transactions due to the strong growth of activity, since the margins obtained on business are generally small, as is to be expected at institutions that attract customers largely on the basis of paying of a return very close to that of interbank market rates. As to the structure of costs, this differs substantially from that of deposit institutions as a whole (Chart II.6B and C), owing to the different type of business involved and the mass entry by certain institutions on the Spanish market. Finally, the market share of institutions specialising in electronic banking in relation to deposit institutions as a whole is still small (Chart II.6.D).

Around 90% of the funds raised through this channel in June 2004 were centred solely on the five leading institutions, while the share of the rest is very small[8]. As might be expected, this fund-raising channel is the main, if not exclusive, means for institutions specialising in this business segment and, conversely, it contributes only marginally to the raising of funds at the other multi-channel institutions or those whose main channel is the traditional branch office.

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**8.** Information available as from early 2003.

## III Solvency

### *III.1 General situation*

The *solvency ratio* of Spanish deposit institutions was 10.3% in June 2004, 20 bp below the June 2003 level and the same as that in June 2002. Under the BCBS definition, it has been on a slightly declining trend that has led to a 1 pp reduction in six years to 12.2% (Chart III.1A).

The *tier 1 ratio* remains amply above the 4% minimum required, although it continued to decline, standing at 7.8% (Chart III.1A).

This behaviour is in response to *capital* having continued to grow moderately (8.8%), driven by the increase in tier 1 capital and, largely, by the strong rise in tier 2 capital, which is growing at a rate of 17.3%, compared with 6.6% in June 2003 (Chart III.1B). *Capital requirements*[1], in line with the acceleration in credit, continued to increase (10.8%), at a rate of 3 pp per annum (Chart III.2A).

The overall behaviour of *tier 1 capital* (which accounts for 75.8% of the total) was predominantly influenced by the strong weight of reserves. The consequence of the pick-up in institutions' profits was a 6.1% increase in reserves. At the same time, reserves at consolidated institutions increased significantly (15.5%), this being partly offset by the rise in losses at consolidated companies, following the slowdown in June 2003. Nonetheless, outstanding preference shares (which account for 18.4% of reserves) did not undergo any significant change, though there were differences across groups of institutions. Intangible assets contributed negatively to tier 1 capital as a result of the increase in goodwill (7%), largely attributable to the rise in the stake in a Latin American deposit institution (Chart III.1C).

After a year in which it had been virtually flat, outstanding subordinated financing grew substantially (18.4%), prompting *tier 2 capital* to accelerate once more (Chart III.1D). The joint weight of preference shares and subordinated financing in total capital increased slightly to 41%.

As discussed in the previous edition of the FSR, *risk-weighted assets* (RWA) continued to quicken as from June 2002 (Chart III.2A). In terms of requirements, this trend is attributable virtually in its entirety to the growth of current credit risk (11.1%) and derived practically in full from the growth of balance-sheet assets (12.4%), the main cause for this lying in the increase in credit extended in business in Spain (16.7%).

The behaviour of unsecured lending to the private sector, accounting for 49.6% of institutions' credit portfolio, was notable as it increased by 11% (almost 3 pp up on June 2003 and 7 pp up on June 2002). Since it is weighted at 100%, its contribution to the capital requirements is the most salient of that of all assets (Chart III.2C). Mortgage-backed risks (with a weighting of 50%) are ranked second in importance in the portfolio (20.9%), closely followed by credits vis-à-vis general government (18.7%), which do not consume capital. Mortgage-backed assets accelerated, growing by 21.1% compared with 13.2% the previous period (Chart III.2B).

Requirements associated with the trading book grew at a rate of 27.9%, but their limited relative weight means that their contribution is very small (Chart III.2A).

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**1.** Calculated as 8% of risk-weighted assets.

SOLVENCY RATIOS AND CHANGE IN CAPITAL

CHART III.1

Deposit institutions


SOURCE: Banco de España.

### *III.2 Analysis based on individual institutions*

The solvency ratio (Spanish rules) for commercial banks has not changed significantly, although over the past year it has fallen by 13 bp to 9.7%. The ratio per Basel rules behaved similarly, remaining virtually unchanged at 12%. The tier 1 ratio, by contrast, dipped by 0.3 pp. A declining trend for all the ratios for savings banks, which were down 0.3 pp, was confirmed. Under Spanish rules the solvency ratio was 11% in June 2004, and 12.6% under Basel rules. This behaviour is more marked in the tier 1 ratio, since it has fallen by somewhat over 1 pp in four years (Chart III.3A).

The growth of capital at *commercial banks* slowed by 1.9 pp to 5.8% (Chart III.3B). The intense momentum of tier 2 capital (which grew by 19.2% compared with 1.3% in June 2003) was in contrast to the slowdown in tier 1 capital (2.9%) and to the increase in deductions due to the excess of shares in non-consolidated financial institutions (85.1%). The trend of tier 1 capital is the result of two opposing factors. On one hand, the improvement in results means that reserves have increased significantly (Chart III.3C). On the other, intangible assets grew by

**REQUIREMENTS** CHART III.2

Deposit institutions


SOURCE: Banco de España.

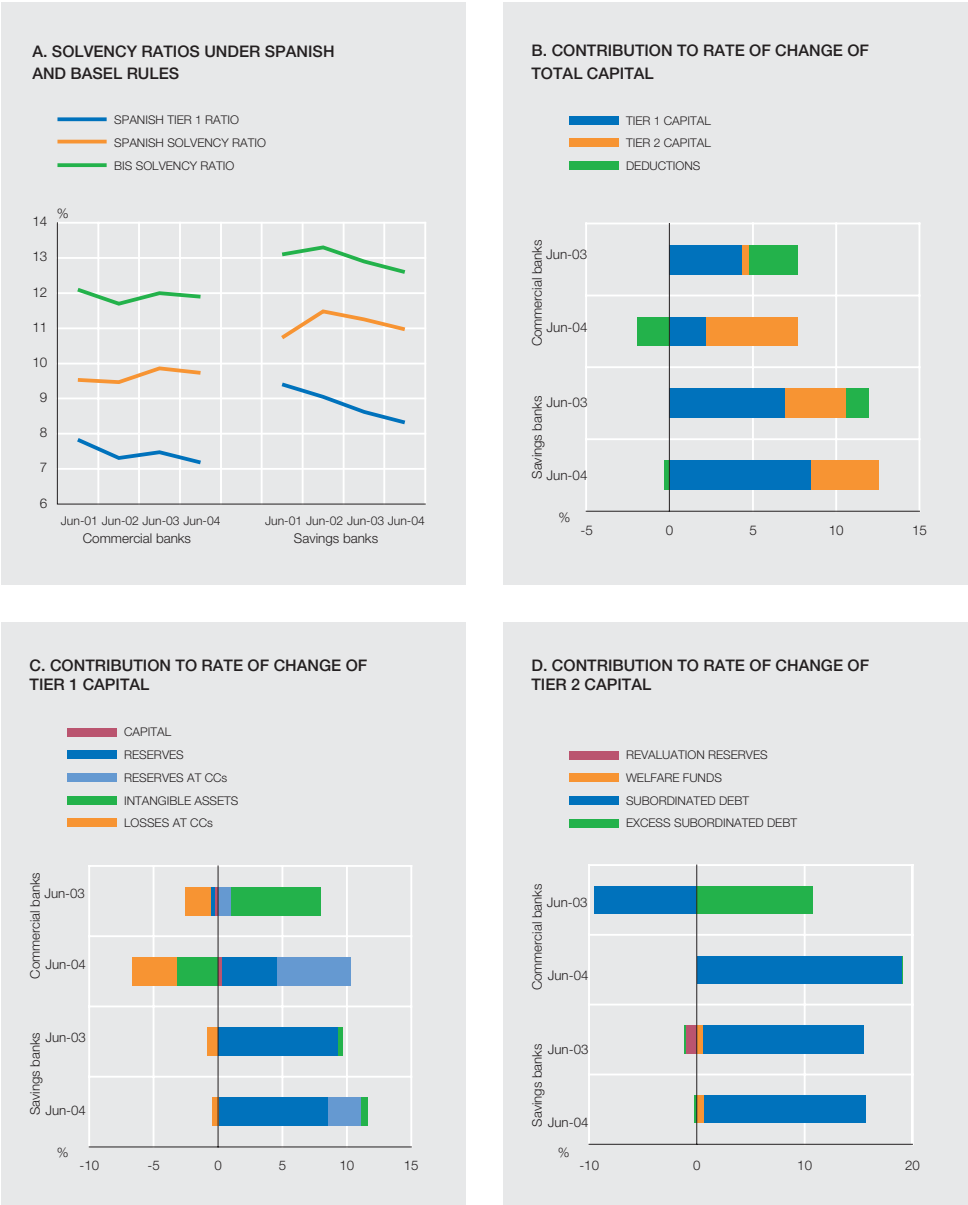
8.9%, after falling in June 2003, owing to the increase in goodwill resulting from operations in Latin America. The growth of tier 2 capital was due to the new issuance of subordinated debt, following the redemptions prior to June 2003 (Charts III.3D and III.4B).

Conversely, *savings banks* saw their capital increase by 12.2% (Chart III.3B), driven by the acceleration in both tier 1 and tier 2 capital (11.1% and 15.4%, respectively). Reserves boosted tier 1 capital, in line with the increase in outstanding preference shares (4.5%), the growth rate of which has been falling gradually since June 2001 (Chart III.4A). The resort to subordinated debt by savings banks continued to become more significant, with growth of 17.4% (Chart III.3D). Tier 2 capital thus now accounts for 27.1% of total capital (somewhat over 5 pp more than 4 years ago).

Commercial banks' requirements grew by 7.2%, driven by the increase in credit in Spain-based business. And adding to this for the first time in two years was growth in business abroad.

**SOLVENCY RATIOS AND CHANGE IN CAPITAL** CHART III.3

Commercial and savings banks




SOURCE: Banco de España.

Balance-sheet assets and, in particular, mortgage assets (23.2%, compared with 7.3% in June 2003) and unsecured assets extended to the private sector (8.9%, against 3%) all rose. At savings banks, requirements continue to increase at a high rate (15.1%), and there are no appreciable changes in relation to the policy pursued in June 2003 (Chart III.4C).

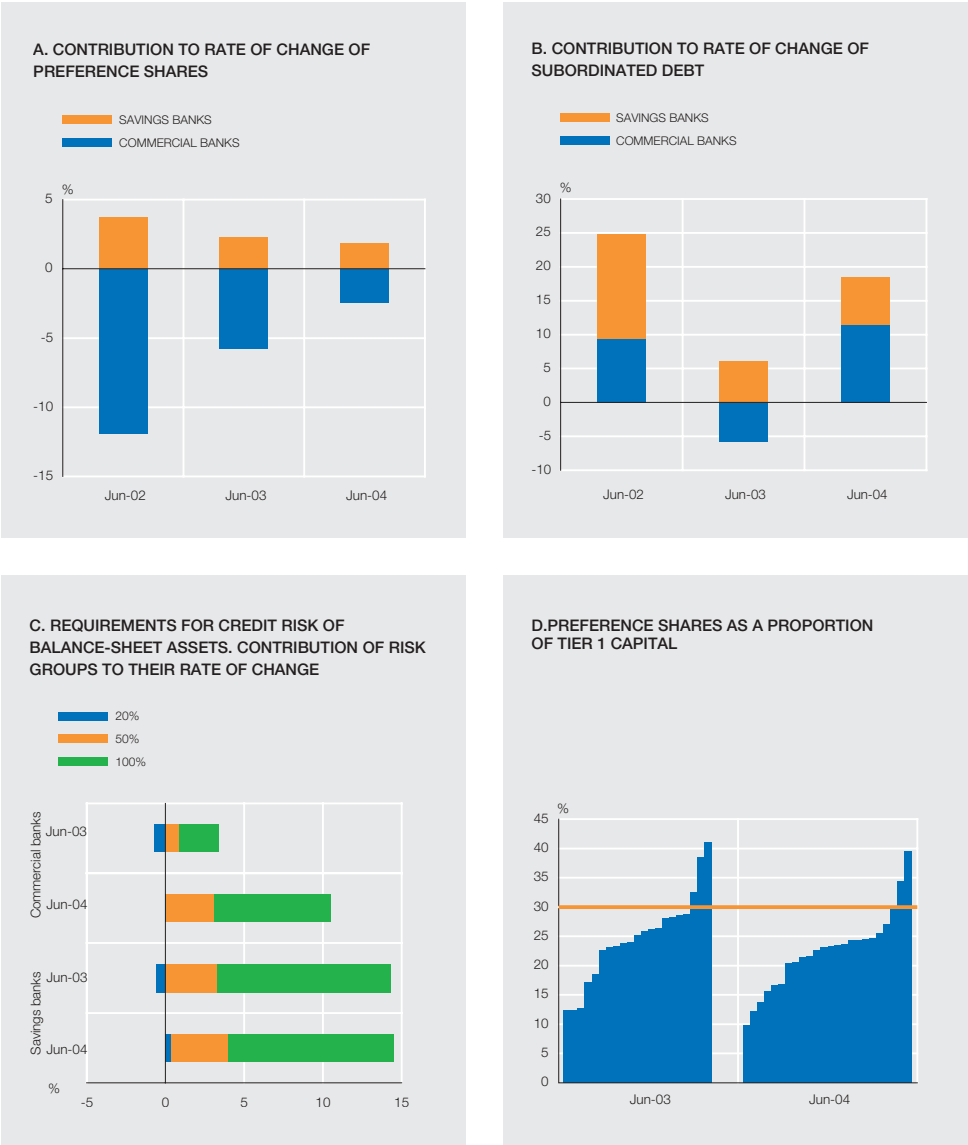
Since June 2003, three new institutions have commenced issuing preference shares, bringing the total to 24, comprising 18 savings banks and 6 commercial banks (Chart III.4.D). The overall trend of this instrument masks considerably differing behaviour from institution to institution. The strong negative contribution of one institution was offset by the positive contributions of a small number of others, while the majority showed no notable changes. The increase in tier 1 capital has meant that the weight of preference shares in tier 1 capital is now less.

The number of large exposures (those whose amount exceeds 10% of the group's capital) increased by 5.2% after falling off in June 2003. Developments in this regard were similar at

CHANGE IN CAPITAL AND IN REQUIREMENTS

CHART III.4

Commercial banks and savings banks




SOURCE: Banco de España.

both commercial and savings banks. However, at commercial banks the increase was due to the rise in exposures subject to reporting (52.5%), since those subject to the overall limit (eight times the capital of the group) fell by 16.7%, whereas at savings banks the increase was due to the rise in the latter group of exposures.

The distribution of the solvency ratio across institutions is in line with the reduction in the overall solvency ratio. In relation to June 2003, 67.8% of institutions reduced their solvency ratio, which in terms of average total assets (ATA) gives a figure of 57.1%. The result of this reduction has been a shift in the distribution of institutions towards lower solvency brackets, concentrating at around 9% (Table III.1). Also, in terms of ATA, the tier 1 ratio of almost two-thirds of institutions has declined, meaning that 71.3% of such institutions showed a lower level tier 1 capital ratio in June 2004[2].

2. Of the two institutions (both of which are very small) failing to comply with the solvency ratio (Table III.1), one is being wound up while at the other the degree of non-compliance with the 8% minimum is around 30 bp.

DISTRIBUTION OF THE SOLVENCY RATIO BY BRACKET TABLE III.1

Deposit institutions

| SOLVENCY RATIO BRACKETS | JUNE-04 | | JUNE-03 | |
|---|---|---|---|---|
| | % ATA | NUMBER OF INSTITUTIONS | % ATA | NUMBER OF INSTITUTIONS |
| <8 | 0.0 | 2 | 0.0 | 1 |
| 8-10 | 67.2 | 47 | 38.5 | 38 |
| 10-12 | 24.6 | 55 | 43.6 | 53 |
| 12-15 | 5.8 | 21 | 16.2 | 33 |
| 15-20 | 2.2 | 25 | 1.4 | 20 |
| 20-25 | 0.0 | 4 | 0.1 | 9 |
| >25 | 0.2 | 17 | 0.3 | 18 |

SOURCE: Banco de España.

STATISTICAL PROVISION

The cyclical position of the Spanish economy remained favourable in the first half of 2004, which made for a reduction in non-performing loans and in specific provisioning for bad debts. As a result, the overall statistical fund continued to increase, rising to €8 billion in June 2004, equal to 0.78% of lending. The amount accumulated in the fund now stands at 71.5% of its limit. A growing number of institutions, with an increasingly greater relative weight in terms of assets, are now at their limit or very close to it (Chart III.5A).

The notable effort made by institutions since July 2000 to build up the statistical fund, the annual provisions to which have accounted for more than 10% of net interest income on average, has led to a most significant increase in the ratio of provisions for bad debts to lending, which has virtually doubled (Chart III.5B).

COMPARISON WITH EUROPEAN BANKS

As indicated on comparing the profitability of Spanish institutions and their European counterparts, the economic circumstances in which European banks operated in 2003 were somewhat more favourable than in 2002, but not free from difficulties. Notwithstanding, the solvency levels for European institutions as a whole were considerably above the regulatory minimum.

As regards Spanish institutions, the strong growth of credit extended (essentially to the private sector) prompted a greater increase in requirements than that observed in capital. Accordingly, the total and tier 1 capital solvency ratios stood slightly below the European average. The type of operations engaged in by Spanish institutions accounts for the relative weight of risk-weighted assets in total assets being 40% greater in Spain.

However, the soundness of Spanish institutions is not only underpinned, as seen in the foregoing section, by the total and tier 1 capital solvency ratios, which are clearly above the regulatory minimum; another factor, adding to the strength, compared with the EU average, of their profit and loss account, is their greater coverage of doubtful loans. The reason lies in the effects of the statistical fund, the increase in the general provision, due to the growth of credit extended, and the at present relatively low, and declining, level of doubtful loans. Comparison of the major Spanish institutions with their European counterparts in respect of solvency is, both in quantitative and qualitative terms, very similar to that of deposit institutions taken as a whole.

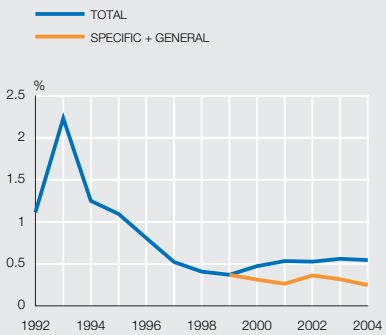
## STATISTICAL FUND

CHART III.5

**A. DISTRIBUTION OF DEPOSIT INSTITUTIONS IN TERMS OF THE STATISTICAL FUND SET UP AS A PERCENTAGE OF LIMIT**

| | JUNE 2003 | | JUNE 2004 | |
|---|---|---|---|---|
| | No. | % ATA | No. | % ATA |
| Institutions without a statistical fund | 46 | 5.3 | 43 | 7.2 |
| Institutions with percentage of limit covered: | | | | |
| < 10% | 9 | 0.9 | 5 | 0.2 |
| 10%-25% | 9 | 1.1 | 11 | 2.5 |
| 25%-50% | 32 | 25.2 | 18 | 7.0 |
| 50%-75% | 53 | 50.3 | 35 | 44.2 |
| 75%-90% | 29 | 7.2 | 27 | 16.2 |
| 90%-100% | 23 | 4.8 | 26 | 8.2 |
| 100% | 70 | 5.3 | 100 | 14 |

**PROVISIONS FOR BAD DEBTS AS A PERCENTAGE OF CREDIT RISK**
**Commercial and savings banks. ID**




SOURCE: Banco de España.

The new capital framework defined by the BCBS (known as Basel II) sets great store by the transparency of institutions (Pillar 3). Box III.1 compares the degree of transparency of Spanish institutions and that of other developed countries' banks.

### RISKS OF FOREIGN FINANCIAL ASSETS

Spanish banks, and the two biggest banking groups in particular, spearheaded a substantial expansion abroad from the mid-nineties. Spanish institutions' presence abroad differs greatly depending on the country (Chart III.6A). The characteristics of each country and how banking business is conducted and risk managed affect the losses due to credit risk that institutions will incur in each national market. Exposure or overall assets in a country is not sufficiently informative about the risk assumed by institutions, since very different probabilities of default (PDs) may correspond to a single exposure.

Drawing on information on the composition of assets abroad (sovereign debt, interbank loans and lending to other sectors, with certain hypotheses about the structure of the credit portfolio with the private sector) and on the PDs for different credit ratings, and extrapolating, using the Spanish experience over the past 20 years, information about PDs on the basis of each country's bad debts ratio, it is possible to obtain an approximation to the PD of financial assets in each country[3].

The product of the average PD of each country and Spanish institutions' assets in that country (which we call risk exposure) is a more informative measure of the risk incurred by institutions in their business abroad than simply exposure. This new measure translates into a change in the ranking of countries (Chart III.6B), with the Latin American countries now appearing as those which concentrate most credit risk[4].

Note that risk exposure thus calculated is the upper limit of the expected loss, since possible recoveries in the event of default are not taken into account; consequently, the actual loss may be far off that value. Further, it should be borne in mind that a sizable portion of these expo-

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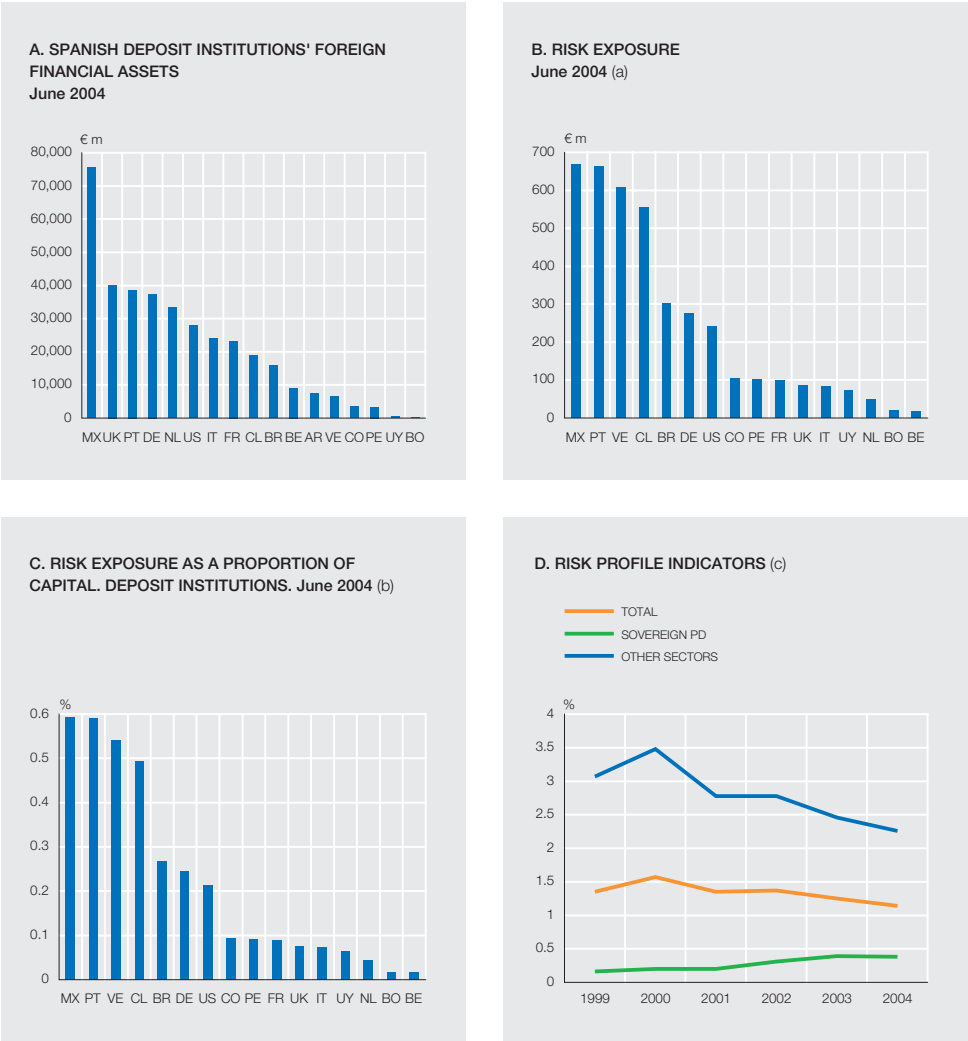
**3.** A more detailed analysis is available in the paper published in issue no. 7 of *Estabilidad Financiera* "Activos financieros en el exterior e indicadores de riesgo" by R. Lago and J. Saurina. **4.** The substantial reduction in risk exposure in Mexico is due to the sizable weight of public debt in local currency, to which a very low PD is assigned in keeping with the rating accorded to such debt. In Portugal, by contrast, most exposure is with the resident private sector, which has a greater PD.

FOREIGN FINANCIAL ASSETS AND RISK CHART III.6




SOURCE: Banco de España.

a. Risk exposure is calculated as foreign assets multiplied by the country's average PD. For Argentina, the amount of risk exposure is €5,766 million.
b. For Argentina the ratio is 5.1%.
c. Argentina is not included in the calculations.

sures is maintained via subsidiaries operating in the country in question. The risk exposure/capital ratio of the institution is a maximum limit for the impact of the credit risk of foreign assets on institutions' solvency. It can be seen (Chart III.6C) that, country by country, and for the countries as a whole, this maximum limit is low (3.5% without Argentina, and 8.6% if we include it)[5], and significantly lower than the excess of capital over the regulatory minimum.

Some bank analysts have designed measures seeking to approximate the risk profile (or risk exposure) of the foreign assets of a country's deposit institutions. The problem is that no distinction is made in these approaches between the different elements making up such assets, and the PD of the sovereign debt of the country where the banking assets are is applied as the measure of risk. The foregoing normally makes for a very downward-biased measure of the

5. Naturally, the impact on each individual institution will vary depending on the distribution of its assets abroad and on its level of capital.

## TRANSPARENCY RATIOS

TABLE 1

| % | SPANISH INSTITUTIONS | | OVERALL BASEL AVERAGE | | |
|---|---|---|---|---|---|
| | 2003 | 2002 | 2001 | 2000 | 1999 |
| Capital structure | 77 | 76 | 82 | 81 | 76 |
| Capital adequacy | 58 | 17 | 55 | 50 | 48 |
| In-house models for market risk | 75 | 69 | 68 | 66 | 65 |
| Internal and external ratings | 63 | 50 | 46 | 36 | 32 |
| Credit risk models | 50 | 33 | 33 | 34 | 33 |
| Securitisation | 6 | 0 | 45 | 36 | 29 |
| Asset quality | 77 | 54 | 61 | 55 | 56 |
| Credit derivatives and other credit improvements | 17 | 8 | 34 | 24 | 24 |
| Derivatives (other) | 33 | 22 | 62 | 56 | 57 |
| Geographical and business-line diversification | 30 | 25 | 65 | 62 | 64 |
| Basis of presentation and accounting policies | 71 | 71 | 84 | 84 | 82 |
| Other risks (operational, interest rate and liquidity risk) | 100 | 100 | 84 | 75 | 65 |
| TOTAL DISCLOSURE RATE | 57 | 46 | 63 | 59 | 57 |

The transparency of deposit institutions to their investors (shareholders, buyers of preference shares, subordinated debt and other securities issued by the institutions, and depositors) is a key factor in ensuring the appropriate management of banks via the disciplining effect of the financial markets.

The Basel Committee on Banking Supervision decided in 1999 to initiate an annual survey *(Public Disclosure Survey by Banks)* on the degree of transparency of the most significant internationally active banks[1]. This survey seeks to evaluate the degree of compliance with the recommendations on transparency made by the BCBS[2]. The Survey contains 104 questions structured in 12 areas (Table 1) on the level of disclosure attained in respect of capital, risks (particularly credit risk) and derivatives. The Committee seeks hereby to identify trends in disclosure practices and to publicise them through the release of the survey results. The survey analyses the Annual Reports of the banks in question, but is completed by the supervisors of each country, not the banks. The information is summarised in the form of the *disclosure rate,* defined as the amount of affirmative replies (the institution is transparent) in proportion to the sum of affirmative and negative replies. Significantly, nonetheless, the nature of the replies always has a substantial measure of subjectivity.

The findings of the latest available survey indicate that Spanish institutions have progressed significantly in their overall level of transparency, with the total transparency ratio climbing from 46% in 2002 to 57% in 2003. However, this ratio remains below the average (63% in 2001) for the overall set of institutions surveyed. The results across areas and their comparison with the average for the institutions as a whole infers that:

a) While the overall transparency ratio is less than that of the Basel average for banks, in five areas the transparency of Spanish institutions is clearly greater. These are: internal and external ratings (63% versus 46%), credit risk models (50% versus 33%), asset quality (77% versus 61%), other risks (100% versus 84%) and in-house models for market risk (75% versus 68%).

b) The areas with a greater degree of transparency in both 2003 and 2002 are those relating to other risks (100%), capital structure (77%), asset quality (77%) and in-house models for market risk (75%), coinciding in the first two cases with the areas of greatest transparency according to the Basel average.

c) The areas of least transparency are securitisation (6%) and credit derivatives (17%), the average situation for this latter variable being among the worst (34%). Moreover, these two areas are among those that have least progressed compared with 2002.

d) The very low level of transparency attained in the area of securitisation (6%) compared with the average (45%) is significant, as is geographical and business-line diversification (30% versus 65%) and derivatives (33% compared with 62%).

e) A more detailed analysis of the least transparent areas shows that: i) Spanish banks do not disclose sufficient qualitative data on objectives and strategies in either the use of derivatives, particularly credit derivatives, or in asset securitisation. ii) In quantitative terms, matters are not much better, with insufficient clarity as to the effect on results of securitisation, of trading activities by type of risk and of derivatives activity distinguishing trading and hedging. In the area of securitisation, it is not specified either whether there is any type of retained risk, subordinated assets and, where appropriate, how it is hedged. Also, the breakdowns are insufficient, or are not along BCBS-recommended lines in terms of exposure to credit risk (by type of counterpart, business line or sovereign risk) and doubtful loans (by sector, type of asset or geographical area). Here, transparency is not only poor in absolute terms but also in relation to the Basel average (in excess of 50% in many cases).

**1.** Somewhat over 50 institutions belonging to the BCBS member countries. **2.** These recommendations feature in the following BCBS publications: Best Practices for Credit Risk Disclosures, September 2000; Recommendations for Public Disclosure of Trading and Derivatives Activities of Banks and Securities firms, October 1999; and, naturally, in Pillar 3 of the final document of Basel II (International Convergence of Capital Measurement and Capital Standards. A revised framework, June 2004).

It should be clarified that the above comparisons were with data for 2003 for Spain and for 2001 for the Basel average. That biases the analysis in favour of Spanish banks if, as would be expected and in line with the trend of Spanish institutions, the average bank has continued improving its transparency in the past two years. This distortion may be particularly relevant where the transparency of Spanish institutions is higher (modelling of risks) owing to the strong impulse the Basel II process has entailed for internationally active banks.

Enlarging the sample of institutions to include other large entities but with a scant level of international activity, the comparison in terms of transparency worsens substantially. Now, the set of Spanish institutions only attains a transparency ratio of 45% in 2003 which, however, marks significant progress on 2002 (34%). It can be deduced from this that, overall, Spanish deposit institutions must continue to strive to improve the information they convey to investors so that the market may contribute effectively to disciplining these institutions. Basel II is going to reinforce this need even further via its third pillar.

risk incurred by institutions in their foreign business. Moreover, the changes in the index may not be a good measure either of the change in risk.

One means of avoiding the above-mentioned biases and achieving a better risk profile indicator involves, first, taking asset composition into account; and, further, using different PDs for each type of asset. As was done to calculate risk exposure, it is possible to construct an aggregate risk profile indicator calculating only the weighted mean of the average PDs for each country (Chart III.6D)[6].

The risk profile of foreign assets can be seen to have diminished progressively since 2001 (or since 2002 if Argentina is included) and to be at a relatively low level in 2003[7]. It is further seen that the exclusive use of the sovereign rating biases the risk profile downwards and distorts evaluation of the changes in the risk profile. The PD of credit to the resident private sector is, as was to be expected, significantly higher than that of sovereign debt.

**6.** Once again, a more detailed analysis can be found in the paper referred to in footnote 31. **7.** The recent pattern is relatively similar if Argentina is included, although the level of the index is , naturally, substantially higher.

# ANNEX: EXPLANATORY NOTES AND GLOSSARY

## 1 Explanatory notes

*Consolidated financial statements of groups of deposit institutions resident in Spain.* Aggregation of the balance sheets or profit and loss accounts of groups of deposit institutions resident in Spain. In the case of institutions that do not have or belong to a consolidable group or that are branches of foreign institutions, their individual accounts are considered for aggregation purposes, and in the case of subsidiaries of foreign institutions, it is the sub-consolidated accounts (those of the group that depend on it) that are taken.

The consolidated financial statements (balance sheet or profit and loss account) comprise the worldwide total consolidated business, with intra-group transactions netted out, of the groups of institutions considered. These groups are made up of the parent institution in Spain (with its branches abroad) and its consolidable subsidiaries, both in Spain and abroad.

The consolidable financial subsidiaries in groups of deposit institutions are those in which control is exercised (control is assumed when voting rights or a share of at least 20% of capital are held) and which belong to one of the following: deposit institutions, specialised credit institutions, securities-dealers companies and securities agencies, investment companies, companies managing collective investment undertakings, companies managing pension funds, portfolio management companies, venture capital companies and companies managing venture capital funds, holders of shares or participations and, finally, institutions, whatever their name or statute, that engage in activities typical of the foregoing (e.g. SPEs, SPVs).

The consolidated accounts of groups of deposit institutions resident in Spain may be of national or foreign institutions; in the latter case they will be subsidiaries or branches of foreign institutions.

These statements (total business), as in Fig. 1, can be presented on the basis of the location in which the institution's operational unit resides, giving rise to business in Spain or abroad (assets in Spain or assets abroad), or the location in which the counterparty resides, giving rise to the sectorisation of business with residents in Spain and with non-residents (or with foreigners). Moreover, if the residence of the operational unit coincides with that of the counterparty, the reference will be to local business, and if it does not, to cross-border business, non-local business or business abroad.

The consolidation of accounts is based on the control of the group by the parent institution and is essential when analysing the capital integrity and financial stability of a banking system.

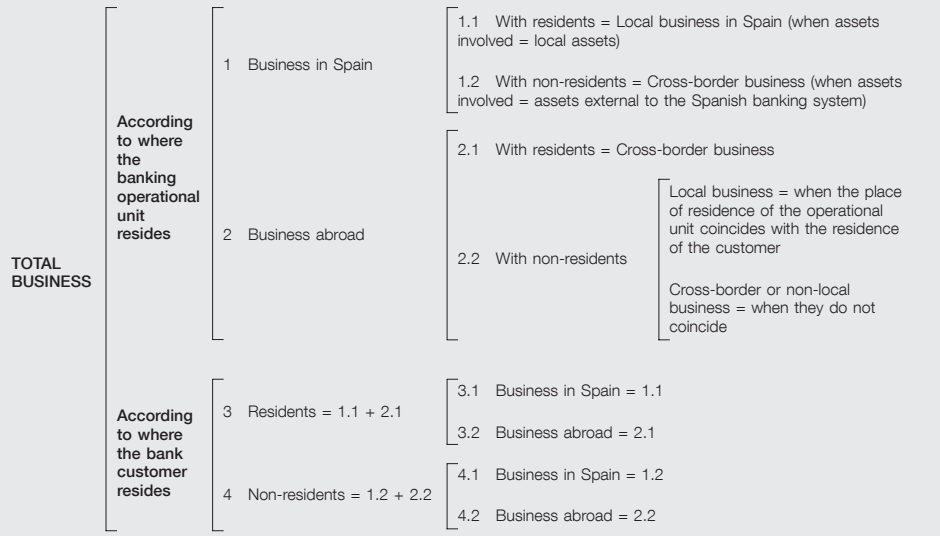
*Individual financial statements of deposit institutions resident in Spain.* Aggregation of individual balance sheets or profit and loss accounts of these institutions.

The individual statements (balance sheet or profit and loss account) comprise the total worldwide business engaged in by individual deposit institutions resident in Spain. These institutions may be national or foreign (subsidiaries and branches of foreign deposit institutions) and are made up of a central headquarters and all its branches abroad (if any), but they do not include the subsidiaries of Spanish institutions operating abroad.

As in the case of consolidated information, the individual statements (total business) can, as observed in Fig. 1, be presented using the location in which the operational unit (central

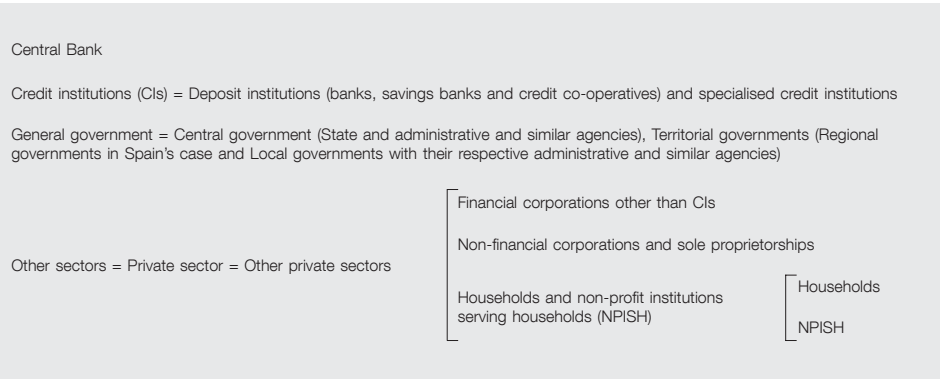
CLASSIFICATION OF ACCOUNTS AND BUSINESS ON THE BASIS OF THE LOCATION FROM WHICH THE INSTITUTION OPERATES AND WITH WHOM IT OPERATES

FIGURE 1




CLASSIFICATION OF BOTH THE RESIDENT SECTOR AND THE NON-RESIDENT SECTOR

FIGURE 2

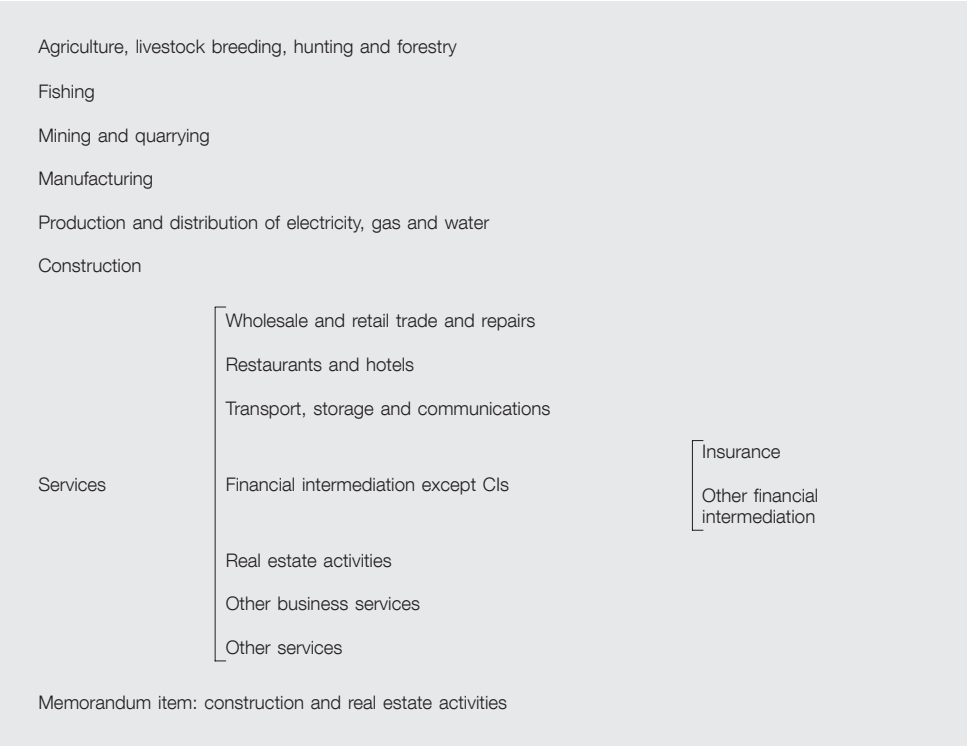



headquarters or branch) resides and the location in which the counterparty resides. However, while total business does not include or nets out transactions between units of the institutions residing in different countries, business in Spain and business abroad does not see a netting out of transactions between the units that reside in these territorial areas: Spain and other countries. In other words, business in Spain includes positions vis-à-vis own branches abroad because they are non-residents and such information is necessary to compile the National Accounts and Balance of Payments, but in total business such transactions are consolidated.

Local business (in the case of Spain, business in Spain with residents), the predominant item of the individual accounts of the institutions that reside in a country, are the basis of the national accounts of said country (Spain) and, therefore, these accounts are linked to the general macroeconomic analysis of the country in question and to the way in which its sectors are financed. Accordingly, there is usually much more information and a greater breakdown of the individual accounts of institutions, as regards their sectorisation, instruments and results, than of the consolidated accounts of their groups.

**CLASSIFICATION OF THE SECTOR NON-FINANCIAL CORPORATIONS, SOLE PROPRIETORSHIPS AND FINANCIAL CORPORATIONS OTHER THAN CIs ON THE BASIS OF THE TYPE OF PRODUCTIVE ACTIVITY IN WHICH THEY ENGAGE** FIGURE 3

Branches or sectors of activity




*Institutional sectors.* The FSR classifies the institutional sectors featured in Fig. 2 as Residents, namely those who have a centre of interest or live in Spain, and Non-residents, those who have a centre of interest or live in a country other than Spain, irrespective of whether they reside or not in the same country as the deposit institution's operational unit. Both institutional sectors are sub-divided into the following sub-sectors: Central banks, CIs, General government and other sectors (households, sole proprietorships and corporations other than CIs).

*Productive activities.* The Report refers to activities undertaken by sole proprietorships and by corporations other than CIs, on the basis of the branches featured in Fig. 3.

The definitions of the balance-sheet and profit and loss account items are to be found in Banco de España Circular 4/1991. Nonetheless, the glossary includes certain items in the light of their greater complexity and relevance for the analysis of financial stability.

## 2 Glossary

*Asset securitisation:* Assignment by an institution of its loans or other receivables (present or future) to a securitisation SPV which, in turn, issues fixed-income securities to be traded on an organised secondary market.

*Asset spread:* Difference between the average return on earning financial assets and average three-month euribor.

*Asset-backed bonds:* Bonds issued by securitisation special purpose vehicles (see asset securitisation).

*Available-for-sale portfolio:* Fixed-income securities or equities that have not been assigned to another portfolio.

*Average total assets:* Average of the assets in the period in which such assets give rise to flows of income. To obtain the assets of which the average is taken, and solely for the purpose of expressing the profit and loss account items in relative terms, the following items are deducted from the total assets of the balance sheet: intangible assets, own stakes and shareholders, prior years' losses, prepaid interest on funds raised at a discount and unmatured accrued interest revenues on investments taken at a discount. In addition, in the case of the consolidated balance sheet, the losses at consolidated companies are deducted and, in the individual balance sheet, as the relevant detailed information is available, the unrealised losses in the available-for-sale fixed-income portfolio.

*Bancassurance:* Strategy involving the joint provision of banking and insurance products, using the same distribution channel and/or the same customer base.

*Basel I:* Capital Accord reached by the Basel Committee on Banking Supervision in 1988. This established a set of recommendations (converted into requirements in a large number of countries) regarding capital, risk-weighted assets and an 8% minimum level for the solvency ratio, which sought to strengthen the solvency of the international banking system, as well as levelling the competitive playing field.

*Basel II:* Revision of the 1988 Capital Accord (Basel I). The basic aim was to promote a more risk-sensitive system of capital requirements, encouraging the use of internal risk measurement methods by the institutions for the purpose, while maintaining the overall level of solvency and ensuring a level playing field.

*Basic margin:* Net interest income plus net commissions.

*Beta:* Measure of the systemic risk assumed by an institution. It is based on the CAPM model (Capital Asset Pricing Model), which considers the market to be the sole risk factor. The beta is calculated as the covariance between the returns on the share and the market, divided by the variance of the market return. In the FSR, the market index used is the DJ Stoxx 50, unless otherwise stated.

*Bid-ask spread:* The difference, at a given moment, between the highest bid price and the lowest ask price for a security.

*Branch:* Offices of the institution situated in a foreign country without independent legal status. They form an integral part of the institution, generally do not have separate accounts (except for internal purposes) and they may not take economic decisions or contract liabilities or possess assets in their own name. Branches are subject to the laws and supervision of the home country (that of the head office).

*Business risk:* That associated with the loss of the position an institution has in the market.

*Capital requirements:* 8% of risk-weighted assets, this being the minimum solvency ratio required by the supervisor.

*Capitalisation:* The market value of a company, calculated by multiplying the number of shares in issue by their price on the stock market.

*Collateralised mortgage bonds:* Securities that can only be issued by CIs, which enable these institutions to secure the participation, in whole or part, of third parties, in one or more mortgages of their portfolio, excluding those used to secure the issuance of mortgage bonds. The term of the bond cannot exceed the residual maturity of the mortgage loan nor can it pay a higher rate of interest.

*Companies valued by the equity method:* Mechanism for including those companies that, despite having a certain stake, are not included in the consolidated group, either on account of their business (insurance and non-financial firms), or because, although they are capable of being consolidated, there is no control (holding of less than 20%) although they are associated. This mechanism consists of valuing the holdings at their underlying book value –net worth– plus (less) the balance of the consolidation goodwill (negative consolidation differences) of the investee.

*Consolidation goodwill:* Difference, at the time of purchase, between the acquisition value and the underlying book value of the stake in a subsidiary or affiliate. This arises from the valuation of intangible assets of value to the purchaser including, among others, the purchased entity's position in the market, customers, reputation and brand image.

*Contingent liabilities:* Transactions under which an institution guarantees the obligations of a third party (guarantees, letters of credit, etc.)

*Corporate banking:* Banking activity with –typically large– non-financial corporations.

*Corporate bond spread:* Measure of the perception of corporate credit risk. Difference between the interest rates on private bonds and risk-free bonds, in the same currency and with similar duration. In the FSR, US Treasury bonds are taken to be risk-free (or very low risk).

*Cost of debt:* See debt service.

*Counterparty risk:* Possibility of incurring losses in the event that the counterparty defaults on its contractual obligations. Unlike credit risk, it is not incurred with the issuer of a financial instrument, but with the counterparty of a transaction (normally a derivative) based on a primary instrument issued by a third party.

*Country risk:* That present in the debts of a country considered overall for circumstances other than normal commercial risk. It arises from the existence of two different national jurisdic-

tions and originates from the ineffectiveness of legal actions against a State for reasons of sovereignty. It is classified as: (i) sovereign risk, when the debtor is the State itself; (ii) transfer risk, which arises from the imposition of restrictions on the conversion of the local currency to a strong currency or on its repatriation; and (iii) political risk, which results from legal provisions or from situations of war or social instability.

*Cover ratio:* Ratio between the provisions for bad debts and doubtful assets.

*Covered bonds (cédulas hipotecarias):* Fixed-income securities that can only be issued by CIs, subject to certain restrictions, which are secured by all the mortgage loans in their portfolio, excluding those assigned to mortgage bonds and collateralised mortgage bonds.

*Credit Default Swaps (CDS):* Swap whereby the purchaser acquires (the seller grants) protection against possible non-payment by a third party. The amount paid for the insurance transaction is considered to be a risk premium, since it provides information on the probability of default by the third party. (See credit derivatives).

*Credit derivative:* Contract involving an obligation to pay that depends either on the value of a debt instrument (loan or bond), or on the solvency, yield spread or credit rating of one or more specified borrowers. This payment obligation is performed either by cash settlement or through the delivery of the underlying asset or assets.

*Credit institutions (CIs):* Firms whose typical activity is to receive deposits or close substitutes for deposits from entities other than credit institutions and, for their own account, to grant credits, and those, other than the foregoing, who issue means of payment in the form of electronic money. Deposit institutions, specialised deposit institutions and the ICO are credit institutions. However, SCIs cannot raise deposits, although they can raise close substitutes for deposits from the public.

*Credit portfolio:* Sum of the outstanding loans granted and the fixed-income portfolio (debt instrument counterpart). The FSR uses this term as a synonym for financing extended and also total lending. This definition is valid for any specifically cited sector and for the economy as a whole.

*Credit rating:* Assessment of the credit quality of a debtor in accordance with its credit risk. A wide range of methods are available to reach this assessment.

*Credit risk:* Possibility of an institution incurring losses in the event of a debtor defaulting, in form and/or time, on its obligations as established in the agreement. It may be presented as insolvency risk or country risk.

*Customer spread:* Difference between the average return on non-interbank lending in euro and non-interbank financing received in euro.

*Debt burden arising from interest:* Ratio between accrued interest and gross disposable income in the period considered.

*Debt burden:* Ratio between the sum of accrued interest and, if applicable, the principal of the debt repaid and gross disposable income in the period considered.

*Debt instruments:* See debt.

*Debt ratio:* Ratio between the debt of a sector and its total assets (financial and real).

*Debt service:* Interest accrued and, where applicable, principal of the debt repaid during the period considered.

*Debt:* The outstanding balance, at a specific time, of loans received and fixed-income issued.

*Deposit institutions:* Subgroup of CIs consisting basically of commercial banks, savings banks and credit co-operatives. The only ones with the capacity to raise deposits from the public.

*Doubtful assets ratio:* Ratio between doubtful assets and financing extended.

*Doubtful assets:* Debit balances that are considered unlikely to be fully repaid on the contractually agreed terms, either because of default or for other reasons (if the institution has reasonable doubts regarding their recovery).

*Earning financial assets:* Financial assets excluding accrual accounts and other assets, i.e. those to which it is possible to assign an explicit financial return.

*Efficiency ratio:* Ratio between operating expenses and gross income; i.e. the percentage of gross income absorbed by operating expenses. A higher value of the ratio corresponds to lower efficiency.

*Exchange rate effect:* Reduction (increase) in the value of balance sheet or profit and loss account items owing to depreciation (appreciation) with respect to the euro of the currencies of the countries in which such items are located or generated, without the activity, profitability or costs abroad in local currency necessarily having fallen (increased).

*Expected losses:* Anticipated losses, i.e. those that on average will arise on a portfolio. Calculated as the average value of the loss distribution, whether or not they have been detected.

*Exposure:* Amount of balance sheet assets and contingent liabilities that may be subject to risk.

*Financial assets:* Cash, loans, fixed-income securities, equities, accrual accounts and other assets. However, references in the FSR to financial assets generally refer to earning financial assets.

*Financial conglomerates:* Groups of financial institutions that cannot be consolidated owing to their nature, i.e. those made up of: 1) credit institutions and their groups and by insurance companies and their groups and, 2) those made up of insurance companies and their groups and securities-dealer companies and securities agencies.

*Financing extended:* See credit portfolio.

*Foreign exchange risk:* Possibility of incurring losses owing to adverse movements in the currency in which the exposure is denominated.

*Foreign-exchange losses or reserves in consolidated companies:* These arise as a consequence of the depreciation or appreciation of the currency in which the unhedged holdings in the capital of foreign consolidated companies are denominated. In simple terms, they are the

difference between converting the net worth of the investee at the current and the historical exchange rate. A depreciation (appreciation) of the currency in which the net worth is denominated, with respect to the euro, entails a loss (profit). Having deducted that part corresponding to minority interests, this loss (profit) is recorded as losses (reserves) in consolidated companies (both being balance-sheet items included in regulatory capital).

*General provision:* Provision in the period considered, charged to the profit and loss account, to the general bad-debt provision, with the application of certain percentages (generally 1% or 0.5% for mortgage loans that fulfil certain conditions) to those credit risks without a specific provision.

*Gross disposable income:* Income available to the various sectors for final consumption (households and general government) and gross saving.

*Gross income:* Net interest income plus net commissions and the result on financial transactions.

*Gross operating profit of non-financial corporations:* Gross value added less staff costs. It may be considered roughly equivalent to the gross operating surplus of the National Accounts and, with the necessary caveats, to the net operating income of CIs.

*Gross value added at market prices (non-financial firm):* difference between the value of its output and its inputs. Also, sales plus the changes in stocks of finished products less the cost of sales (operating expenses other than staff costs) plus the change in stocks of raw materials and work in progress.

*Held-to-maturity portfolio:* Comprises the fixed-income securities the institution has decided to hold to redemption.

*Historical volatility:* Annualised standard deviation of the market prices of the underlying for the period analysed. It approximates the market's perception of risk.

*Implied volatility:* Using a particular option valuation model, in which all the parameters are considered given except the underlying price of the asset in question and its historical volatility, the implied volatility is obtained, at a given moment, by introducing the market price as the underlying price of the asset. It gives an indication of the market's perception of risk.

*Insolvency risk:* Possibility in the normal course of business (normal commercial risk), of incurring losses as a consequence of a debtor defaulting on its payment obligations.

*Interest rate risk:* Possibility of incurring losses on account of changes in interest rates.

*Interest-bearing liabilities:* Those liabilities (deposits and fixed-income securities) that have an explicit financial cost associated with them.

*Interest-rate curve:* At a given moment, it shows the level of actual rates at different terms for a risk-free asset.

*Internal ratings based approach (IRB approach):* Basel II encourages the institutions themselves to determine their own capital requirements, solely (advanced IRB) or partially (foundation IRB) using their own methods, according to the risk incurred.

*Investment banking:* Banking activity in the primary and secondary securities markets (underwriting and placement of issues, securities trading, financial advice to companies, etc.)

*Kernel estimator:* Non-parametric estimation of the density function, which provides a continuous and smoothed graphic representation of such function.

*Large exposures:* From a regulatory standpoint, large exposures are those vis-à-vis a single person or economic group, where the sum of the amount of the credit and trading-book risk exceeds 10% of the regulatory capital of the banking group. Since, on account of the high degree of exposure to one borrower, such exposures can jeopardise the solvency of an institution, in the event that the customer concerned is in difficulty, there are individual and overall limits to the large exposures that institutions can assume.

*Large firms:* According to the BCBS, in its proposed new capital accord, a large firm has annual sales of more than €50 million.

*Liability spread:* Spread between average three-month euribor and the average cost of interest-bearing liabilities.

*Liquidity risk:* In the FSR this refers to asset liquidity risk, i.e. agents' inability to dispose of their assets without significantly affecting market prices.

*Losses incurred:* Losses that have actually arisen on an institution's portfolio.

*Market index:* Constructed by taking the average of a fixed but adjustable set of firms listed on a specific stock market or on various markets. Its movement is a good approximation to the movement of the stock market concerned.

*Market risk:* Possibility of incurring losses owing to changes in the value of positions on or off the balance sheet, as a consequence of adverse movements in interest rates, in exchange rates and in the market prices of assets. Sometimes interest rate risk, foreign exchange risk and price risk are mentioned directly, and other times market risk is called price risk.

*Mixed groups:* Those that include consolidated groups of credit institutions and of insurance companies. In Spain, the Banco de España or the Directorate General of Insurance and Pension Funds are responsible for their supervision, depending on the importance of their constituent institutions.

*Mortgage bonds (bonos hipotecarios):* Fixed-income securities that can only be issued by CIs, subject to certain restrictions, specially secured by the mortgage loans assigned to them in the deed.

*National deposit institutions:* Savings banks, co-operatives and those commercial banks that are majority-owned by Spaniards with head office or parent company in Spain

*Net debit/credit balance:* Difference between the financing extended (asset) and received (liability). For CIs, when this difference is positive the net balance is a debit one and when it is negative, a credit one.

*Net interest income:* Financial revenue less financial costs.

*Net operating income:* Gross income less operating expenses.

*Net wealth:* See net worth.

*Net worth:* Assets less liabilities.

*Non-voting equity units:* Securities that can be issued, subject to certain restrictions, by savings banks to strengthen their capital. Their remuneration depends on the profits obtained by the institution, subject to certain limits. In the event that the institution is wound up they come behind the ordinary creditors, holders of subordinated debt and holders of preference shares.

*Offshore centres:* Territories that grant a preferential tax treatment to companies based in them.

*Operational risk:* Possibility of incurring losses as a consequence of inadequate internal procedures, staff or systems, or as a consequence of external events.

*Own funds attributed to the group:* Sum of the capital stock, reserves (including reserves at consolidated companies), group net income and the provisions for general banking risks, less shareholders' equity and own stakes, and the prior years' losses at the controlling entity and at consolidated companies. The average level, obtained in a similar way to ATAs, is used as the denominator in the calculation of ROE.

*PER (Price Earnings Ratio):* Ratio between the listed price of the shares of a particular company and the earnings obtained thereby during a specified period (year, business cycle, etc.).

*Permanent holdings portfolio:* Holdings in subsidiaries and affiliates intended to serve in a lasting way the activities of the institution or group to which it belongs.

*Preference shares:* Securities issued by credit institutions that, in certain circumstances, form part of their tier 1 capital. Their remuneration is fixed and periodic, but may be nil if the bank or its group suffer losses, in which case, normally, it is not cumulative (i.e. when no remuneration is paid one year it cannot be recovered in future). They are normally issued without a redemption term but the bank may redeem them, with the prior permission of the Banco de España, after five years.

*Price risk:* Possibility of incurring losses owing to adverse movements in asset prices.

*Primary securities market:* Market on which securities are issued and redeemed.

*Provisions:* Flow during the period, charged to the profit and loss account, whose purpose is to correct the valuation of individual assets, or of specific groups of assets, or to anticipate specific payments or contingent charges (specific provisions), or to cover general risks (general provisions). The main specific provisions are the bad-debt, country-risk and securities-price fluctuation provisions.

*Real assets:* Non-financial assets or tangible fixed assets.

*Regulatory capital:* That allowed by the regulator for the purposes of calculating the solvency ratio. Tier 1 and tier 2 capital are distinguished, on the basis of their ability to absorb losses.

Spanish regulations define regulatory capital more strictly than Basel I, especially as regards tier 2 capital.

*Result on financial transactions:* Profits less losses on the trading book and on creditors on securities arising from valuation differences, on exchange differences, on non-hedging futures transactions and on the available-for-sale fixed-income and equity portfolios, as well as provisions and write-downs in relation to the securities-price fluctuation provisions.

*Retail banking:* Banking activity with small and medium-sized businesses and households.

*Return on assets (ROA):* Ratio between net income (after taxes) attributed to the group and average total assets.

*Return on equity (ROE):* Ratio between net income (after taxes) attributed to the group and the average own funds attributed to the group.

*Risk exposure:* Product of the exposed amount and the PD assigned to such amount. The effect of loss given default (LGD) is not included.

*Risk mitigation:* Elements incorporated into a transaction, in the form of security interests, guarantees or credit derivatives, that help to reduce its associated risk.

*Risk premium:* The return required from a security in excess of that on a safe asset to compensate for the higher risk of the former relative to the latter.

*Risk profile of assets:* Assets weighted by risk with respect to total assets.

*Risk profile of the credit portfolio:* Calculated on the basis of the standard method for the statistical provision by multiplying the parameters assigned to each of the six categories of risk by the exposure contained therein. The six categories are: *Risk-free,* which includes, among others, exposures to EU general governments or exposures guaranteed by the latter; *Low-risk,* which includes loans secured by mortgages on completed housing when the outstanding risk is less than 80% of the appraisal value of the housing and transactions in which the borrower is an A- or higher rated firm; *Medium/low-risk,* which includes leasing transactions not included in other risk categories and those risks secured by some security interest other than those mentioned in the preceding two categories; *Medium-risk,* which includes risks vis-à-vis residents in Spain not included in other risk categories; *Medium/high-risk,* which includes loans to individuals for the purchase of durable goods and current goods and services; *High-risk,* which includes credit card balances and the current- and credit-account overdrafts of borrowers not included in the risk-free category.

*Risk profile or risk exposure (financial assets abroad):* The probability of default multiplied by the exposure or, where applicable, the assets potentially subject to risk.

*Risk-weighted assets:* The balance-sheet assets and contingent liabilities of an institution multiplied by the relevant weights, according to the instrument and the counterpart sector (Basel I). The weights attempt to reflect the credit, foreign exchange and market risk associated with each exposure.

*Rollover risk:* Possibility of losses arising from the need to resort to the market given the lack of coincidence between the maturity of the instrument that provides the financing and the time horizon for which it is required.

*Secondary securities market:* Market on which securities issued on primary markets are traded.

*Senior debt:* Debt which, in the event of liquidation, ranks for repayment before other debt.

*Solvency coefficient:* Percentage ratio between regulatory capital and risk-weighted assets, which according to current law (CBE 5/1993) shall be at least 8%.

*Sovereign spread:* Measure of the market's perceptions of the probability of non-payment of the government debt of a particular country. It is the difference between the return on a bond representative of the debt issued by a country and that on a bond of a country with minimal credit risk, denominated in the same currency and with a similar duration.

*Special purpose vehicles (SPVs):* Used by deposit institutions for various purposes (e.g. securities issuance), normally, though not always, domiciled in offshore centres and, in Spanish accounting regulations, included in banks' consolidated balance sheets.

*Specialised credit institutions:* Financial institutions that are not permitted to raise deposits from the public, although they can raise close substitutes for deposits, for example by issuing securities with a maturity of more than one year or interbank financing.

*Specific provision:* Provision in the period considered, charged to profit and loss account, to the specific bad-debt provision. The risks that should be provisioned, with the application of specific percentages, with certain exceptions are: assets classified as doubtful in accordance with their default, doubtful contingent assets and liabilities, except for guarantees and other indemnities given, classified as doubtful for reasons other than default and guarantees and other indemnities given, both by reason of their delinquency and for reasons other than their default.

*Standardised approach:* Regulatory approach to risk measurement and capital requirements that is analogous to the current Basel I, but more sensitive to risk as it allows external ratings to be used as a measure of risk that affects the weights applied to the counterparty.

*Statistical provision:* Provision in the period considered, charged to the profit and loss account, to the statistical bad-debt fund. This provision is based on the latent (or inherent) risk, which is essentially the average expected losses arising from credit risk, estimated on the basis of the losses over a complete business cycle. It is calculated as the difference between this latent risk and the specific provision for the year. Thus, during the favourable stages of the cycle, when specific provisions are less than average losses, provisions are made to the statistical fund, while during cyclical downturns, amounts from the previously created fund are credited to the profit and loss account. These two provisions therefore have opposite effects on the profit and loss account. The maximum level of the statistical fund is three times the latent risk. This risk can be calculated using the institution's internal model, when so authorised by the Banco de España, or using the standard model supplied by the regulator.

*Structural position in foreign currency:* Unhedged fixed assets in foreign currency (investments in property for own use, significant holding of a permanent nature and, in the individual balance sheet for business in Spain, endowments to branches abroad), that are converted at the exchange rate of the date of their purchase.

*Subordinated debt:* Debt which, in the event of liquidation, ranks for repayment behind other debt, only preceding shares and, where applicable, non-voting equity units and preference shares.

*Subsidiaries:* Independent legal persons established in accordance with the laws of the country in which they reside that are totally or partially owned by their parent company. In general, in the FSR this term refers to subsidiaries in consolidated groups located abroad.

*Syndicated loans:* Loans for which a temporary association of financial institutions is created to distribute the shares in the large amount of the loan among them.

*Tier 1 capital:* Basically made up of capital, disclosed reserves, preference shares and non-voting equity units, less goodwill.

*Tier 1 ratio:* More restrictive measure than the solvency ratio, since the numerator consists of tier 1 capital only. It must be at least 4%.

*Tier 2 capital:* Basically made up of subordinated debt, although certain limits apply.

*Total lending:* See credit portfolio.

*Total spread or return on intermediation:* Difference between the average return on earning financial assets and the average cost of interest-bearing financial liabilities. The sum of the institution's asset and liability spreads.

*Trading book:* Fixed-income securities or equities that are publicly quoted and whose trading is rapid, deep and cannot be influenced by individual private agents, which institutions maintain in their assets for short-term profit on their price movements.

*Treasury or trading activity:* Operations carried out for profit on the wholesale financial markets by a special unit of the institution, involving the management of risk positions, speculation, within the limits set by the institution, and/or covering its borrowing requirements and hedging its risks. These operations also provide services to customers.

*Uncommitted assets or solvency margin of insurance companies:* equivalent to the own funds of credit institutions.

*Unexpected losses:* Unanticipated losses on a portfolio. Calculated as the loss associated with a sufficiently high confidence level of the loss distribution, less the expected loss.

*Universal banking:* That performed by institutions which engage in corporate, investment and retail banking activities without distinction.

*Unrealised capital gains:* Unrealised net profit arising from the difference between the market and book value of the securities recorded in the institution's securities portfolio.

*Unsectorised accounts:* The capital and provisions of an institution less the net balances (assets – liabilities) of accrual accounts and other accounts, that are not assigned to any grouping either on the basis of residence (residents/non-residents) or on the basis of an institutional criterion (monetary financial institutions, general government and other sectors).

*Value at risk (VaR):* Maximum loss on a portfolio, to which a certain probability is assigned, during a specific time horizon.

*Weighted average range:* Weighted average bid-ask spread for listed securities.

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