

**FINANCIAL STABILITY  
REPORT**

**11/2006**

BANCO DE **ESPAÑA**  
Eurosisistema











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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
CNMV	Comisión Nacional del Mercado de Valores (National Securities Market Commission)
DIs	Deposit institutions
ECB	European Central Bank
EMU	Economic and Monetary Union
EU	European Union
FSA	Financial Services Authority
FSAP	Financial System Assessment Program
FSR	Financial Stability Report
FVCs	Financial Vehicle Corporations
GDI	Gross disposable income
GDP	Gross domestic product
GVA	Gross value added
GVAmP	Gross value added at market prices
IAS	International Accounting Standards
ICO	Instituto Oficial de Crédito (Official Credit Institute)
ID	Data obtained from individual financial statements
IFRSs	International Financial Reporting Standards
IMF	International Monetary Fund
LGD	Loss given default
m	Millions
MEFF	Mercado Español de Futuros y Opciones (Spanish Financial Futures and Options Market)
MMFs	Money market funds
NPISHs	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
SMEs	Small and medium-sized enterprises
SPV	Special-purpose vehicle
TA	Total assets
VaR	Value at risk
WTO	World Trade Organisation





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## Introduction

Since the last issue of the Financial Stability Report (FSR), the profitability of Spanish deposit institutions has increased, while their solvency indicators have remained significantly above the regulatory minimum levels. The growth of activity, both in Spain and abroad, and the efficiency increase help, once more, to explain the developments. However, the credit policies of the institutions have become particularly important, against a background in which the financing granted, especially in certain areas of business, continues to grow at high rates.

### **Banking risks**

*The global economic situation, and that of the Spanish economy in particular, have been favourable...*

Since the publication of the last FSR in May 2006, global economic activity has been characterised by robust growth, without any significant progress being made in the correction of global imbalances, and despite the persistence of a certain degree of uncertainty regarding the path of future oil prices. Against this background, the euro area was more buoyant during the first half of 2006, and the Spanish economy achieved a notable rate of expansion.

*...contributing to the substantial buoyancy of banking activity...*

The favourable situation helped Spanish deposit institutions to record highly buoyant activity in June 2006, both in Spain and abroad.

*... both as regards lending to households and businesses.*

With regard to business in Spain, credit to the resident private sector continued to accelerate during the first half of the year. Financing for house purchase grew faster than total credit, but at a similar rate to six months previously, while financing to business accelerated significantly. Contributions to this acceleration were made by credit to other sectors apart from construction and property development, although the latter two sectors continue to attract a very significant part of the funds lent to business. At a favourable time for the Spanish economy, industrial and services firms are displaying a solid financial position, which helps to explain the acceleration in the bank finance they have received.

*June 2006 figures show an increase in the concentration of credit portfolios in the construction and property development segments ...*

Credit to construction and property development firms is still growing at higher rates than to other sectors, leading to an increase in the concentration of the institutions' credit portfolio in this sector. The strong growth in recent years, the increase in concentration and the higher credit risk displayed by this segment of business in previous Spanish recessions are factors that need to be reflected in institutions' credit policies and risk management.

*... while doubtful assets, but not doubtful assets ratios, have increased...*

Doubtful assets ratios remained at very low levels owing to the buoyancy of lending and the favourable performance of the Spanish economy, with both non-financial corporations and households continuing to display a solid financial position. However, in June 2006, an increase

in the volume of doubtful assets was discerned, which was more pronounced in some business segments than in others.

*...and indicators of financial pressure on the non-financial private sector are rising.*

Within this overall positive scenario, some of the risks already identified in previous FSRs persist. Firstly because, as historical experience and empirical studies show, there is a significant lag between credit growth and the emergence of doubtful assets. Secondly because, despite the solid financial position of Spanish firms and households, indicators of financial pressure continue to rise, with increases in both the debt burden and in the level of indebtedness.

*Activity abroad is growing, but the asset risk profile is not.*

The buoyancy of deposit institutions' activity was also observed in their business abroad, yet it proved to be compatible with a reduction in the risk profile of their foreign financial assets, partly owing to the favourable situation in the main Latin American economies in which Spanish institutions operate, and partly owing to the greater weight in the composition of assets of regions with a lower relative risk.

*The increase in activity requires recourse to the international markets...*

Institutions' growing lending activity has not been completely financed by traditional bank deposits. Instead institutions have continued to resort to international interbank markets and securities issuance.

*...although market and liquidity risks have remained contained.*

In May the international financial markets suffered a bout of volatility with significant decreases in the prices of financial assets, especially high risk ones, although from June onwards the difficulties abated. No special tensions have been detected in the case of Spanish deposit institutions either as regards market risk or liquidity risk. However, the generosity of monetary and financial conditions may, at some time, decrease.

## **Profitability**

*The profitability of Spanish deposit institutions increased during the period to June 2006...*

Since the last FSR, the results of Spanish deposit institutions have been favourable, so that the trend of the preceding years was extended, with the differential between the return on equity (ROE) and the yield on public debt widening once again. The strength of the income statement of Spanish institutions is clear from its three margins (net interest margin, gross income margin and net income margin), which increased in absolute terms. It should be noted, however, that the new accounting framework introduced by Banco de España Circular 4/2004, which incorporates International Financial Reporting Standards, has probably entailed greater volatility in the income statement.

*...thanks in part to the increase in activity and efficiency ...*

The sound running of Spanish institutions in the period to June 2006 was largely based on buoyant lending, operating expenses that grew by much less than activity and the improvement in efficiency. This efficiency gain is not concentrated in a few institutions, but has been across the board, although it was most notable among larger ones. This efficiency gain is

partly a result of the structural costs being spread over a greater volume of activity. However, a reduction in activity would have a somewhat negative impact on the institutions' efficiency.

*...confirming the relatively good position vis-à-vis European institutions ...*

The good results in terms of profitability and efficiency of Spanish deposit institutions held up when compared with those of EU and euro area institutions which, following a less favourable time in some countries, have generally recorded some very positive financial results.

*... and the markets' positive perception of Spanish deposit institutions.*

In line with the foregoing, the market information of large Spanish institutions shows that there are economic and financial situation has been supported by continual appreciation of their stock market prices, although they recorded temporary falls during the drought of market turbulence between May and June. The perception of risk by market participants in relation to Spanish institutions remained steady since the last FSR.

## **Solvency**

*Solvency ratios remained well above the regulatory minimum levels...*

The total and tier 1 solvency ratios of Spanish deposit institutions are well above the regulatory minimum levels. The high rate of growth of activity has led to sharp growth in capital requirements which have, however, been covered by an increase in total capital. The total solvency ratio held steady, although the tier 1 ratio displayed a slight downward trend.

*... and at around the EU average.*

Comparison with the situation of European Union and euro area institutions shows a relatively favourable position if the strong rate of growth of activity in Spain is taken into consideration. Both the total solvency ratio and the tier 1 ratio are at around the European average.

*In short, although the main elements of risk relating to credit growth persist, Spanish deposit institutions have sustained their strength in terms of profitability and solvency...*

To sum up, since the last FSR, the strength of Spanish deposit institutions has been confirmed, both in terms of their profitability and solvency, although the elements of concern relating to the strong growth of lending and its concentration in certain business segments persists.

*... and also their notable resilience in the face of unfavourable scenarios.*

The recent assessment of the Spanish financial system by the International Monetary Fund (IMF) notes that the Spanish financial system is highly resilient in the face of increases in credit risk, market risk, interest rate risk in the balance sheet and liquidity risk.



## I Banking risks

### I.1 Risks and activity of financial intermediaries

#### I.1.1 RISKS

In *business in Spain* the strong pace of *credit to the resident private sector* continued, with a rate of 25% being recorded in June 2006. Bank financing to firms has accelerated significantly in the past twelve months from growth of 17.9% in June 2005 to 25.4% in June 2006. Part of this pick-up is due to the trend in lending to firms other than construction and property development firms, which grew at 14.8% in June 2006, the highest rate in the last six years (Chart I.1A). The favourable trend of economic activity and the sound financial position of industrial and services firms helped to explain the acceleration of bank credit to businesses.

Also, *credit to construction and property development* firms continued to accelerate, reaching a rate of 39.7% in June 2006. Bank financing to property development firms quickened further in the first half of 2006, with a growth rate of 46.7% in June. In the past three years credit to property development firms has grown at rates exceeding 40% year-on-year, which reflects the current buoyancy of the Spanish real estate sector. In the past, strong growth in lending ended in high doubtful assets when a significant cyclical downturn of the economy arrived<sup>1</sup>.

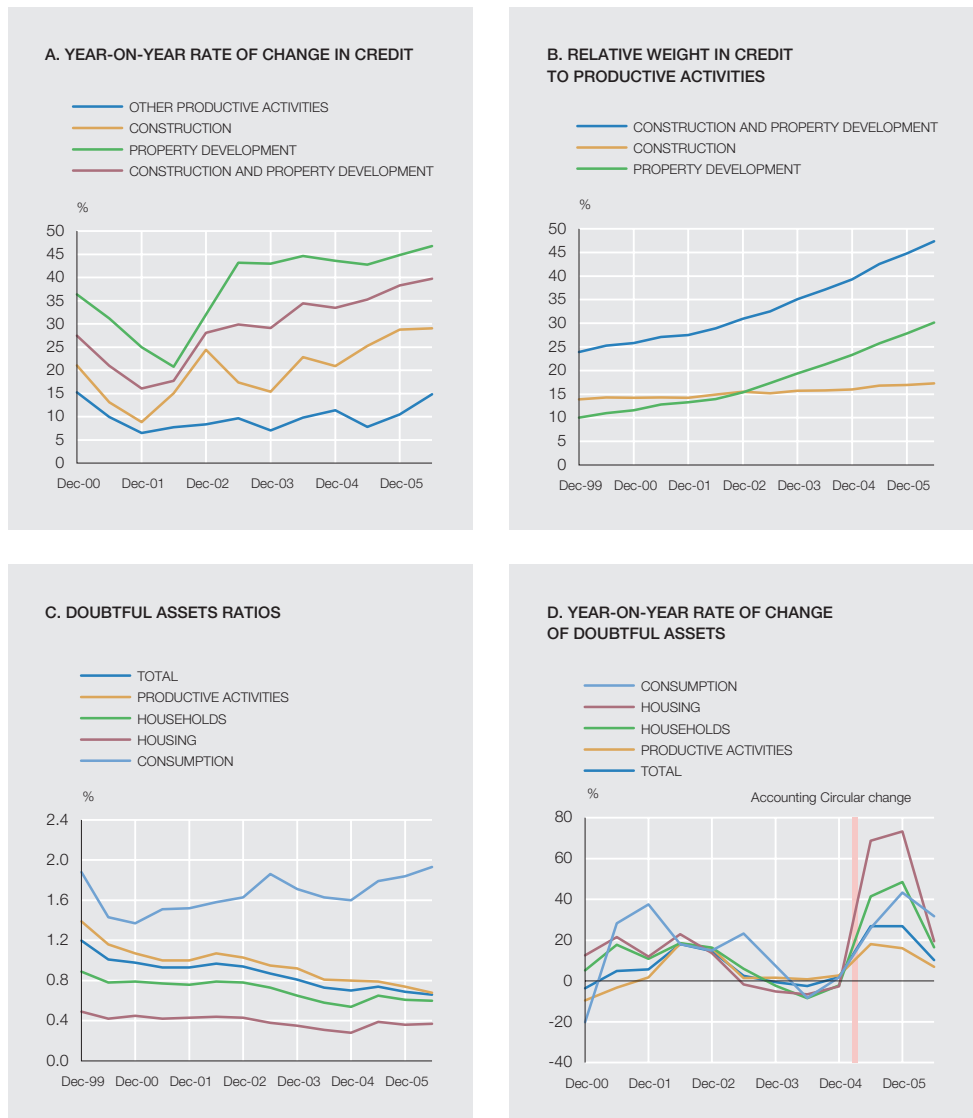
The strong expansion of credit to the real estate sector in recent years has significantly raised the *credit concentration* of deposit institutions. In June 2006, nearly one-quarter (23.8%) of the credit extended to the resident private sector by Spanish deposit institutions was used to finance construction and property development firms (whereas the value-added of construction as a percentage of GDP is 11.4%). Within corporate finance, the concentration is even higher (Chart I.1B), since in June 2006 the real estate sector received nearly half of lending to non-financial corporations (47.4%), and real estate developers received 30.1% of it.

The recent developments in the Spanish economy, with sustained employment growth, low real interest rates and a sound financial position of firms, along with the aforementioned strong growth of lending, led to stable low *doubtful assets ratios* (Chart I.1C). That of bank lending to companies stood at 0.68% in June 2006, while that of lending to households was somewhat lower at 0.60%. However, the latter is the result of contrasting trends in consumer finance, with growing doubtful assets ratios that now stand at 1.93%, and house purchase lending, with a doubtful assets ratio that has held steady in the past year at around 0.4%. The doubtful assets ratio in lending to construction and property development is lower than the overall average for companies, largely due to the strong growth of credit (the denominator of the ratio), since doubtful assets are growing significantly (18% year-on-year in June 2006).

In fact, despite the low levels of doubtful assets ratios from a broad historical perspective, it should be noted that the volume of *doubtful assets* is growing, in certain cases at high rates (Chart I.1D). Thus, in June 2006 doubtful assets in the total credit extended by deposit institutions to the resident private sector were increasing at a rate of 10.2% with respect to the situation of relative stability before the change in accounting rules<sup>2</sup>. Analysis by business segment shows that doubtful assets are growing particularly fast in consumer credit (31.8%), while in

---

1. The empirical relationship between credit expansion and future doubtful assets is one of the main arguments for prudential regulation and, in particular, for credit loss provisions. In this respect, see the paper of G. Jiménez and J. Saurina, "Credit cycles, credit risk, and prudential regulation", in *International Journal of Central Banking*, Vol. 2, No. 2, June 2006, pp. 65-98. 2. As remarked in the previous two FSRs, the change introduced by Banco de España Circular 4/2004 resulted in a significant increase in doubtful assets because if one payment falls past-due, the entire outstanding amount has to be classified as doubtful. This change resulted in a substantial, albeit temporary, increase in the growth rate of doubtful assets in June and December 2005, and an increase in the volatility of the series that is difficult to calibrate and adjust.



SOURCE: Banco de España.

house purchase and corporate lending the increase is smaller (19.4% and 6.9%, respectively).

The *risk profile of financial assets abroad* decreased slightly in the first half of 2006 and therefore continued at the lowest levels of the last seven years, helped by the positive performance of the Latin-American economies and by the geographical diversification carried out by institutions.

Meanwhile, the *insurance* sector, characterised by a highly significant presence of insurance companies that are subsidiaries of deposit institutions, performed favourably in 2005 in terms of activity, profitability and solvency, thereby contributing to the stability of the Spanish financial system as a whole.

I.1.2 ACTIVITY OF FINANCIAL INTERMEDIARIES

The consolidated balance sheets of Spanish deposit institutions reflect vigorous activity (Table I.1), although the growth recorded for assets up to June 2006 (14.7%) is somewhat lower than in previous FSRs. This buoyancy is largely due to the performance of lending to the private



**CONSOLIDATED BALANCE SHEET**  
Deposit institutions

TABLE I.1

ASSETS	JUN-06	(% CHANGE)	RELATIVE	RELATIVE
	(€ m)	JUN-06/ JUN-05 (%)	WEIGHT JUN-05 (%)	WEIGHT JUN-06 (%)
Cash and balances with central banks	42,810	9.2	1.7	1.6
Loans and advances to credit institutions	232,675	0.9	9.9	8.7
General government	50,591	0.1	2.2	1.9
Other private sectors	1,720,053	25.2	59.2	64.6
Debt securities	335,232	0.4	14.4	12.6
Other equity instruments	83,915	10.2	3.3	3.2
Investments	31,878	13.3	1.2	1.2
Derivatives	65,107	-23.9	3.7	2.4
Tangible assets	35,056	-8.2	1.6	1.3
Other assets	63,704	0.5	2.7	2.4
<b>TOTAL ASSETS</b>	<b>2,661,021</b>	<b>14.7</b>	<b>100</b>	<b>100</b>
Memorandum items:				
Financing to the private sector	1,809,754	24.3	62.8	68.0
Financing to general government	215,045	-9.9	10.3	8.1
Total doubtful assets	14,396	7.4	0.6	0.5
Total doubtful assets ratio	0.62			
Provisions for bad debts and country risk	32,646	16.8	1.2	1.2
LIABILITIES AND EQUITY	JUN-06	VAR. JUN-06/ JUN-05	RELATIVE WEIGHT JUN-05	RELATIVE WEIGHT JUN-06
	(€ m)	(%)	(%)	(%)
Cash and balances from central banks	60,004	29.7	2.0	2.3
Deposits from credit institutions	426,866	9.8	16.8	16.0
General government	62,440	10.7	2.4	2.3
Other private sectors	1,204,844	10.3	47.1	45.3
Marketable debt securities	465,420	55.6	12.9	17.5
Derivatives	71,114	-6.8	3.3	2.7
Subordinated debt	67,053	19.9	2.4	2.5
Provisions	35,551	-3.7	1.6	1.3
Other liabilities	114,787	-9.4	5.5	4.3
<b>TOTAL LIABILITIES</b>	<b>2,508,079</b>	<b>15.1</b>	<b>93.9</b>	<b>94.3</b>
Minority interests	6,013	-6.7	0.3	0.2
Valuation adjustments	15,087	-18.3	0.8	0.6
Own funds	131,839	13.7	5.0	5.0
<b>TOTAL EQUITY</b>	<b>152,939</b>	<b>8.5</b>	<b>6.1</b>	<b>5.7</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>2,661,021</b>	<b>14.7</b>	<b>100</b>	<b>100</b>

SOURCE: Banco de España.

a. The remaining assets and liabilities entries not explicitly considered, including valuation adjustments, are included in "Other".

sector in business in Spain. At the same time, given the favourable world economic situation, the activity of business abroad is expansionary.

Consolidated balance sheets  
of deposit institutions

One source of the growth of activity was business in Spain which, with a relative weight of 77.3% of the total, posted an increase of 14.9%. Despite a slowdown of 7 pp with respect to June 2005, the growth of activity continued to be notable, and was in line with the buoyancy of the Spanish economy, which is achieving larger GDP increases than its neighbours. Business abroad, which grew by 14.3%, also contributed to the increase in total activity. In addition, its relative weight (22.7%) is similar to the high reached at the beginning of the decade following the expansion of Spanish banks in Latin America.

As regards the *asset structure*, financing to the private sector, particularly credit extension (Chart I.2A), continued to grow faster than the balance sheet total (24.3% against 14.7%). Thus, continuing the trend reported in previous FSRs, the weight of financing to the private sector again increased (5 pp since June 2005, to 68% of the balance sheet). The buoyancy of business in Spain (24.8%) is largely due to the expansionary behaviour of financing to households and firms. This behaviour is related to that of secured lending (basically house purchases and real estate construction and development), which grew by 29%. Indeed, its relative weight in the balance sheet, and also in financing to the private sector, has been rising in recent years (Chart I.2B).

The growth of financing to the private sector seen in business in Spain was boosted by that in business abroad, which amounted to 22.5%. Thus its weight in total activity abroad rose from 57.8% in June 2005 to 62% in June 2006. In this case the buoyancy of secured lending (growth of 19.5%) was strongly boosted by that of other credit (growth of 28.1%).

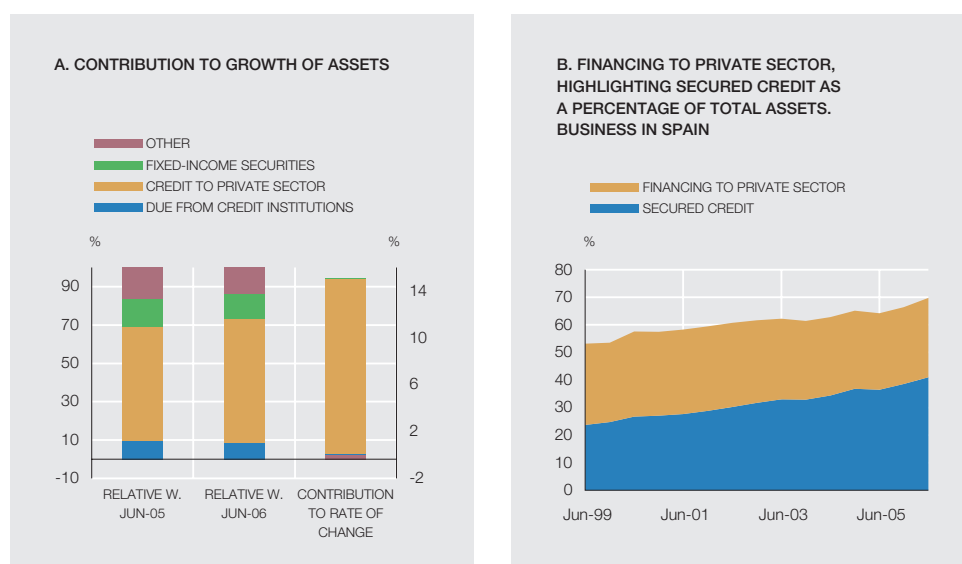
Against this background of growth in activity, the doubtful assets of Spanish deposit institutions at consolidated level increased in June 2006 by 7.4%, or 2.9 pp more than in December 2005. This increase in doubtful assets was particularly pronounced in business in Spain, where they grew by 10.7%. They grew very modestly in business abroad (1%).

However, this rise in doubtful assets did not pass through to the doubtful assets ratios, which continued to decrease. Hence the doubtful assets ratio of total business stood at 0.62% (7 bp less than in June 2005), that of business in Spain was 0.54% (4 bp less than in June 2005) and that of business abroad was 0.93% (16 bp less than in June 2005). The decrease in these ratios was due to the high growth of the amount of credit extended. Comparison of the volume of doubtful assets with the credit loss and country risk provisions set up by Spanish deposit institutions shows that these provisions amount to more than twice the doubtful assets. In any event, it should be kept in mind that the time that usually elapses between the granting of a loan and its possible classification as doubtful depends, among other factors, on the phase of the business cycle, which for the Spanish economy and for most of the countries in which Spanish deposit institutions operate, is now clearly expansionary.

Financing to general government decreased by 9.9% in June 2006, losing ground in bank balance sheets from 10.3% of the total in June 2005 to 8.1% in June 2006. Geographically, the decrease in financing to general government took place both in Spain (-10.1%) and abroad (-9.5%).

Shares (classified under other equity instruments in Table I.1) increased by 10.2% against a background of Spanish and international financial markets that were favourable in 2005 and somewhat more uncertain in the first half of 2006. Since assets grew by more than this figure, the relative weight of shares decreased by 1 bp to 3.2%. Meanwhile, share investments behaved similarly, since they increased by 13.3%, with an unchanged weight in the balance sheet of 1.2%.

Turning to the *liability structure*, which grew by 15.1% in June 2006, the main trends reported in previous FSRs were confirmed. Thus received from the private sector (households and firms) grew moderately (by 10.3%), which meant that their relative weight fell by 1.8 pp to 45.3% (Chart I.3A). The situation is similar in domestic and foreign business, since both in Spain and abroad private sector deposits lost relative weight. However, the growth recorded in Spain was substantially stronger (13.4%) than abroad (1.5%).



SOURCE: Banco de España.

The moderate growth of private sector deposits contrasted with the high pace of financing to this sector. Thus the traditional position, i.e. financing to plus deposits from households and firms, increased in relative weight by 7 pp to 22.7% (Chart I. 3B).

Spanish deposit institutions obtained financing in the interbank market, although the June 2006 data reflect only a moderate increase in deposits taken by credit institutions (9.8%). Therefore, the interbank position increased slightly from June 2005 (by 5 bp to -7.3%; Chart I.3B).

The financing of activity through the issuance of marketable securities was again vigorous, with growth of 55.6%, and, as a result, their relative weight in institutions' balance sheets rose by 4.3 pp to 17.5% (Chart I.3A). The inability of household and corporate deposits to cover the strong expansion of credit to the private sector explains the growing recourse to securities markets by Spanish deposit institutions. These also resorted to subordinated financing, which grew by 19.9% and its relative weight in the balance sheet increased by 1 bp to 2.5%.

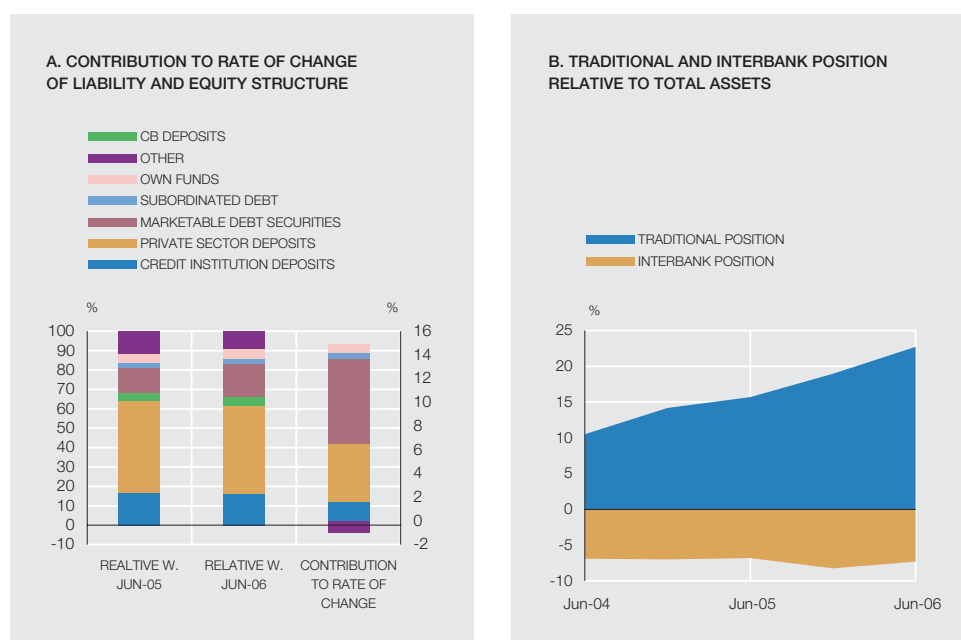
Finally, *equity* grew by 8.5%, its relative weight in the balance sheet total decreasing slightly from 6.1% to 5.7% in June 2006. The increase in equity was due in full to the change in own funds (growth of 13.7%), since minority interests and valuation adjustments decreased by 6.7% and 18.3%, respectively.

Insurance companies

The provisional data of the Directorate General of Insurance and Pension Funds<sup>3</sup> show that the Spanish insurance sector performed well in 2005, with increases in activity, profitability and solvency in both life and non-life insurance. This performance is also seen generally in European companies enjoying a cyclical upturn.

The activity of the Spanish insurance sector grew by 8.3%, a rate similar to that of the previous year (8.6%). Nonetheless, in recent years this sector has lost weight in the total assets of the

3. Seguros y Fondos de Pensiones. Informe 2005 (Insurance and Pension Funds. 2005 Report). Dirección General de Seguros y Fondos de Pensiones.



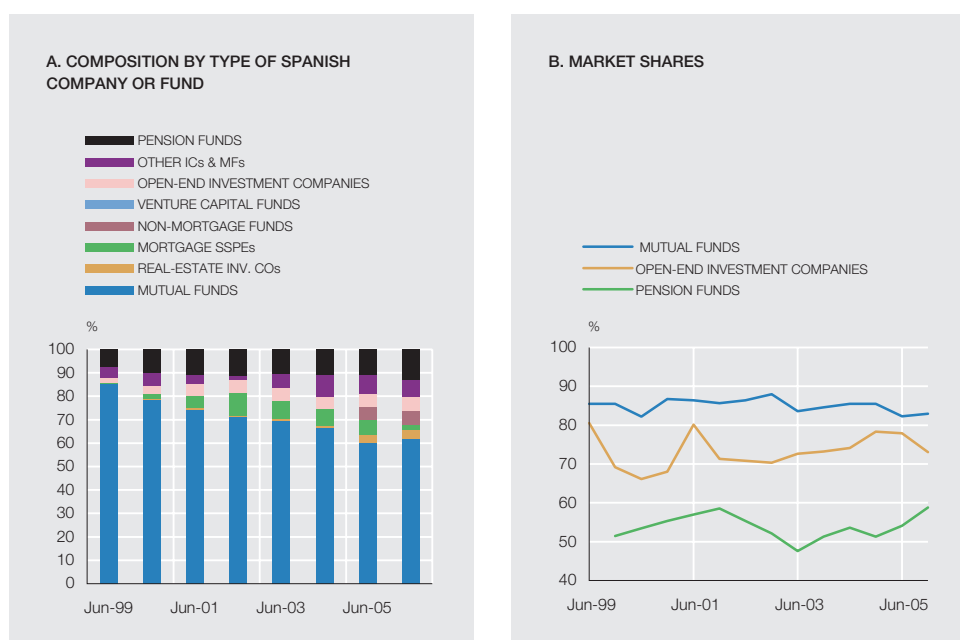
SOURCE: Banco de España.

Spanish financial system, since insurance company assets have grown much more slowly than those of credit institutions. Whereas insurance assets amounted to somewhat more than 11% of credit institutions' assets in 2002, this proportion was 8.8% in 2005.

The asset item that has grown most in the last two years is investments in shares. However, unlike in other European countries, these have a very low weight in assets (2%). The item that contributed most to asset growth is investments in fixed-income securities, which account for more than half of insurance company assets. Meanwhile, investments on behalf of policyholders that bear the investment risk, after the falls of previous years, grew once again (10.5%), representing 5.1% of assets. The liability structure has changed little in the last few years. However, capital and reserves grew by 15% in 2004 and by 14.6% in 2005, now representing 10.1% of liabilities, which strengthens the solvency of these entities. Moreover, profitability improved, the ROE of the total insurance sector rising from 18.2% in 2004 to 21.6% in 2005.

In *life insurance*, the gross premiums earned grew by 7.8% as a result of an increase of 4.5% in premiums in traditional business and of 50.1% in unit-linked business. The growth of unit-linked premiums and, in general, of investments in equity instruments reflects the favourable stock market performance. Gross claims increased by 5% with respect to the previous year and, accordingly, the ratio to premiums decreased to 80.9%, while operating expenses grew by 6.5%. All this meant that the result on the technical account increased by 6.3%. Capital requirements grew by 7%, while the solvency margin (equivalent to the own funds of credit institutions) rose by 7.3%, and the ratio of the two stood at 201%, evidencing the strength of the life insurance segment.

In *non-life insurance*, the gross premiums earned were up by 7.4% while gross claims rose by 9.1% and, accordingly, the claims ratio was 69.8%. Operating expenses increased by 6.6% and the result on the technical account rose by 5.7%. Capital requirements grew by 7.6%, well below the effective increase in credit institutions' own funds (19.6%). As a result, in 2005 own



SOURCES: CNMV, DGSFP and Banco de España.

funds represented 363% of requirements, against 327% in 2004, evidencing not only the solvency of the non-life segment, but also the fact that it is increasing.

#### Asset management

The assets of all funds and companies managed by management companies that are subsidiaries of deposit institutions grew by 12.5% in June 2006 compared with the same period of 2005, although this was a slowdown with respect to the growth of the previous two years. If the total funds received by deposit institutions are defined as off-balance-sheet funds under management (through subsidiaries) plus customer deposits, marketable securities issued and subordinated financing, it can be seen that the first component represents 18% of the total funds received (24.6% in commercial banks and 8.5% in savings banks).

The assets of the funds and companies managed by deposit institutions in June 2006 represented 73.4% of these institutions' total assets under management, whereas in June 1999 they represented 90.2%, consisting predominantly of capital market mutual funds and, a considerable distance behind, pension funds (Chart I.4A). Spanish funds account for 68% of the total fund assets managed by commercial banks (87.5% in 1999) and 95.6% of those managed by savings bank (98.9% in 1999).

Of the total assets of funds and companies managed by Spanish deposit institutions in June 2006, commercial banks accounted for 80.6%, savings banks 18.6% and credit co-operatives 0.9%. Within Spanish funds and companies, commercial banks managed 74.6%, savings banks 24.2% and credit co-operatives 1.2%. In the last few years, commercial banks have been increasing their share of the total under management due to their activity abroad, since in Spain they have lost some of their share to savings banks, which manage practically no foreign funds. These developments largely reflect the business strategies followed by these two types of banks.

Additional evidence of the major role of banks in the Spanish financial system comes from analysis of the market share that Spanish deposit institutions hold in the asset management market through their fund management companies (Chart I.4B).

## 1.2 Credit risk

### 1.2.1 IMPACT OF THE MACROECONOMIC BACKGROUND

#### a. Spain and the euro area

The economic activity of the euro area gained momentum in the first half of 2006, driven mainly by exports and investment. Between April and June, GDP grew by 2.6% in year-on-year terms, against 1.7% in the fourth quarter of 2005 (Chart I.5). The rate of expansion of the Spanish economy was notable. According to the most recent estimates drawn from the National Accounts, GDP in that period rose by 3.7% year-on-year, one percentage point above the rates of March and December 2005.

Although the Spanish economy performed favourably and the external environment clearly improved, no significant headway was made in correcting the overall imbalances and the uncertainty as to oil prices continued. From a more national standpoint, no major progress was made in resolving the problems of competitiveness and growing private-sector indebtedness. Therefore, the main risk factors cited in previous FSRs for Spain's medium-term growth outlook are still applicable.

#### Non-financial corporations

In the first half, the debt of non-financial corporations continued on the accelerating trend apparent in 2005, with a first-half growth rate of more than 25%. As regards instruments, bank credit extended by resident institutions was again the most important component, although another noteworthy development was the faster growth of foreign loans and of debt issues. The information on the purpose for which credit was extended, relating to the first half, reflects a notable increase in the rate of expansion of bank funds received by the construction and property development sector, while in most other business segments the increase is much more moderate.

The vigorous borrowing resulted in a fresh increase in the aggregate debt ratios of the non-financial corporations sector (Chart I.6A). This, along with the higher cost of debt, meant that the interest burden continued its upward trend to stand at nearly 20% of gross operating profit plus financial revenue. Also, the faster rate of increase of net interest payments and the slowdown in the gross operating surplus for the 12 months to June 2006, contributed to a moderate decrease in the return on equity of non-financial corporations as a whole.

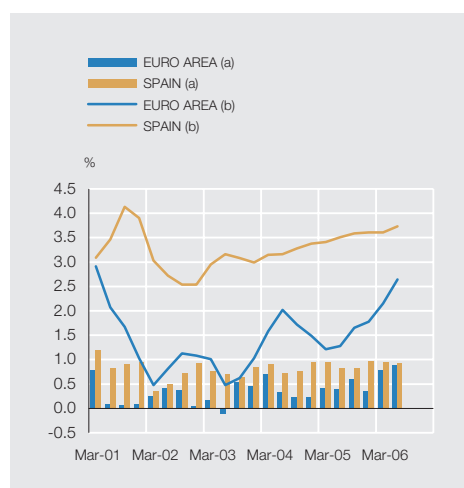
The most recent data of the Central Balance Sheet Data Office Quarterly Survey (CBQ), which are for Q1, also point to an upward trend in the debt and debt-burden ratios. The rise of the former was particularly sharp, basically due to the need to finance an acquisition by a large telecommunications company. Despite the higher financial costs, the return on equity of the total CBQ corporations again increased. This is explained by the behaviour of the large corporate groups, since this indicator dipped slightly for other firms.

At mid-2006, analysts' expectations as to the profit growth of listed non-financial corporations (in which large firms are over-represented) over the next 12 months are for rates that are high, albeit lower than those projected three months earlier. Meanwhile, the risk premiums negotiated on the credit derivatives markets held at low levels, evidencing the market's favourable view of the credit quality of these firms.

#### Households

Despite the increase in the cost of financing, household indebtedness again rose rapidly in the first half, at more than 20% in year-on-year terms. Credit for house purchases continued to be the most expansionary component, although the buoyancy of consumer credit was also notable.

The increase in interest rates and in household debt led to a further rise in the indicators of financial pressure on households. Hence both the debt ratio and the debt-burden ratio continued to rise in 2006 Q1 (Chart I.6B). As shown in Box I.1, at end-2005 the first indicator was



SOURCES: INE and Eurostat.

a. Quarter-on-quarter rates.

b. Year-on-year rates.

higher than that recorded for the total euro area and similar to that of the United States. However, the interest payments by Spanish households in that period, expressed as a proportion of their gross disposable income, were similar to those of euro area residents and lower than those of US residents.

In the real estate market, house prices continued on the slowing trend initiated last year (their year-on-year growth rate fell to 10.8% in Q2), in line with the expected scenario of gradual, orderly adjustment of the current values of these assets. In any event, the still-high growth rate of the value of these assets enabled a further rise in household net equity, offsetting the progressively greater financial pressure on the sector.

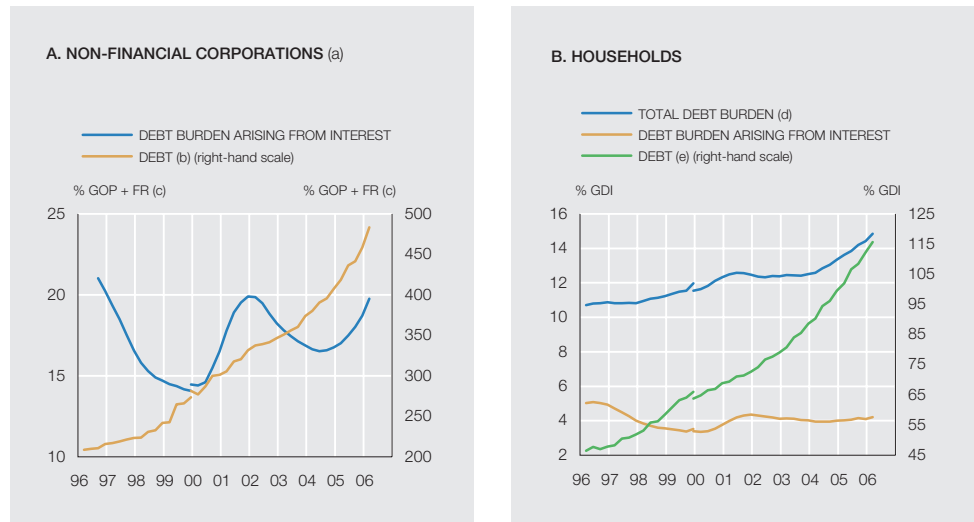
In short, although the aggregate financial position of households continues to be sound, in the last few quarters the risks signalled in previous reports in relation to possible rises in interest rates, income and asset (especially house) prices have become more pronounced.

#### b. Rest of the world

Global financial and macroeconomic developments have been characterised by robust economic growth, by the containment of inflationary pressure, which, despite the high rates of activity and the oil price growth, worsened only moderately, and by generous financing conditions, except for the volatility seen in the financial markets in May-June<sup>4</sup>. Hence the strength of economic growth in most areas amply offset a significant slowdown in the United States in Q2. This even enabled the global economic growth forecasts for the whole of 2006 to be revised upward to around 5%, close to the high recorded in 2004 (5.4%). Against this background, global monetary conditions continued to tighten gradually, although the steadiness of official US interest rates since August and the downward revision of market expectations as to official interest rate movements in the US and Japan, have slowed this trend.

The main risks of this central scenario are associated with a larger-than-expected economic slowdown in the United States and its consequent spill-over to other economies, with a worsening of inflation inducing an energetic reaction by the monetary authorities, or with a disorderly correction of global imbalances. Any of these scenarios would very probably reduce

4. See Box I.2 for a more detailed analysis.



SOURCE: Banco de España.

a. From 2000, a provisional estimate of revenues consistent with Spanish National Accounts, base 2000, is used.

b. Interest-bearing borrowing.

c. Gross operating profit plus financial revenues.

d. Estimated interest and principal payments.

e. Including bank credit and securitisation.

appetite for risk, which could significantly affect the financing conditions of firms and of emerging countries. In any event, among these risks, that of a sharp appreciation of the euro associated with a traumatic correction of the US external deficit, although certainly not the most likely scenario would have highly significant consequences for the euro area.

In the *United States*, GDP growth in 2006 Q2 fell to 2.6% in annualised quarterly terms, against the robust growth of 5.6% in Q1 (Chart I.7A). This slowdown was the result of a significant setback in consumption and private investment. Despite this, GDP growth for the whole of 2006 may be as high as 3.4%, a similar level to that in 2005 (3.2%). The main risks for this scenario are the weakening of the real estate market and its possible impact on consumption and investment. Meanwhile, the current account deficit worsened further in Q2 to 6.5% of GDP, due largely to higher oil prices. Underlying inflation stood at 2.8% in August, six basis points above the level in 2005. In sum, although the rate of activity remained relatively robust, uncertainty heightened as to whether it would remain that way in a setting in which there are still no signs of correction of the external deficit or of a change in the inflationary trend.

The 2006 Q2 GDP of *Japan* grew at an annualised quarterly rate of 0.8%, which signified that the year-on-year rate decreased to 2.5%, compared with the robust 3.6% recorded previously. This significant slowdown resulted from slacker exports and more moderate growth in residential and public investment, which had shown particularly positive behaviour at the beginning of the year. The Bank of Japan, after some months in which it drastically reduced the supply of liquidity, raised the official interest rate to 0.25%.

In the *United Kingdom* the GDP growth for 2006 Q2 was 0.8% and the year-on-year rate stood at 2.6%, two basis points higher than in 2006 Q1. This growth was based on the positive behaviour of domestic demand, including most notably the recovery of private consumption (up by 1% in quarter-on-quarter terms) and private investment growth (1.7% in the quarter). The contribution of external demand was fairly negative, despite the buoyancy of exports. The Bank of England raised official interest rates by 25 bp to 4.75% in August, after an unex-



In the past decade, the financing of Spanish households has shown notable buoyancy, exceeding that of their receipts. As a result, between 1995 and 2005 the debt ratio of households, which started from a level below that of neighbouring countries, increased by more than 65 pp to above 110% of the sector's gross disposable income (GDI). This was higher than the average for the euro area and near the figure in the US (Chart A). The increase in household debt may have some implications for the sector's ability to meet the financial obligations arising from its debt. An increase in credit normally carries associated with it an increase in the periodic interest payments and principal repayments, which will, nevertheless, depend on variables such as the interest rate and maturity of the transaction.

Examination of interest payments relative to the GDI of households in Spain, the euro area and the US between 1995 and 2005 (Chart B) shows the following. First, despite the growing debt, these costs have not increased in Spain because of the sharp decrease in the cost of debt. Second, in comparative terms, the interest burden of Spanish households at end-2005 stood at a level similar to the euro area average and below the corresponding value in the US.

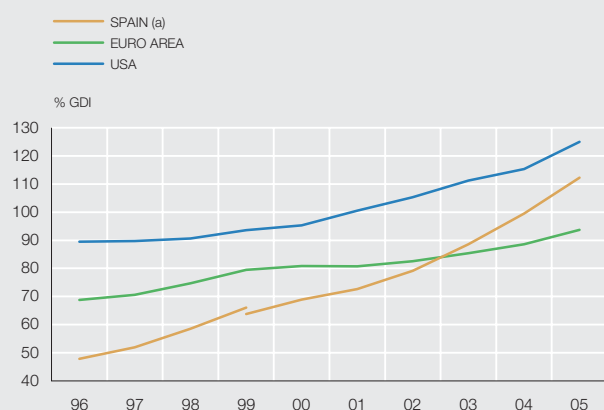
It should however be kept in mind that households also have to repay the outstanding principal. Methodological differences prevent a comparison of these costs across countries. In the

case of Spain, the available estimates showed that the financial effort of households, measured as the as a percentage of their GDI represented by the payments associated with their debt, has increased in a lower proportion than the debt. This reflects, in addition to the lower cost of debt, the longer average maturity of loans. However, more recently the indicator has accelerated as a result of the continued buoyancy of financing received and the end of the process of interest rate reductions. This ratio now stands at 15%, more than 4 pp higher than in 1995.

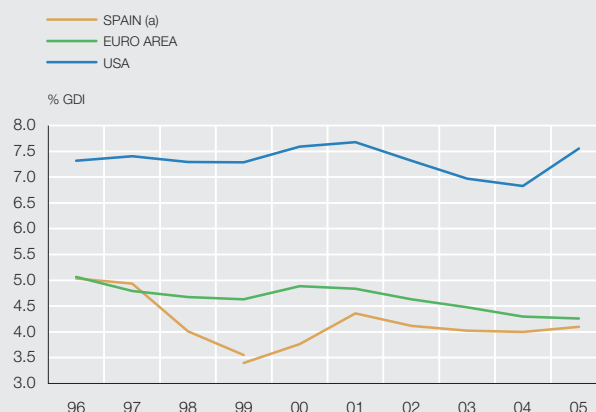
Despite the higher debt burden, on average its level does not seem to represent a significant level of financial pressure that could lead to an appreciable increase in doubtful assets. However, it should be remembered that these estimates are based on aggregate information and could mask less favourable situations for certain groups. In this respect, studies conducted using the *Encuesta Financiera de las Familias* (Spanish Survey of Household Finances – “EFF” by its Spanish abbreviation)<sup>1</sup> with 2002 data confirm that while a representative indebted household uses a moderate proportion of its income to meet the obligations arising from its debt, there is a not insignificant percentage of households with outstanding debt (7%) for which this ratio in 2002 was above 40%. This finding was particularly evident in the lower income strata, where the indicator reached higher levels than those in the US for the same population segment<sup>2</sup>.

1. See “Survey of Household Finances (EFF): description, methods and preliminary results”, *Economic Bulletin*, November 2004, Banco de España. 2. See Box 5.3 of the *Banco de España Annual Report 2005*.

#### A. DEBT

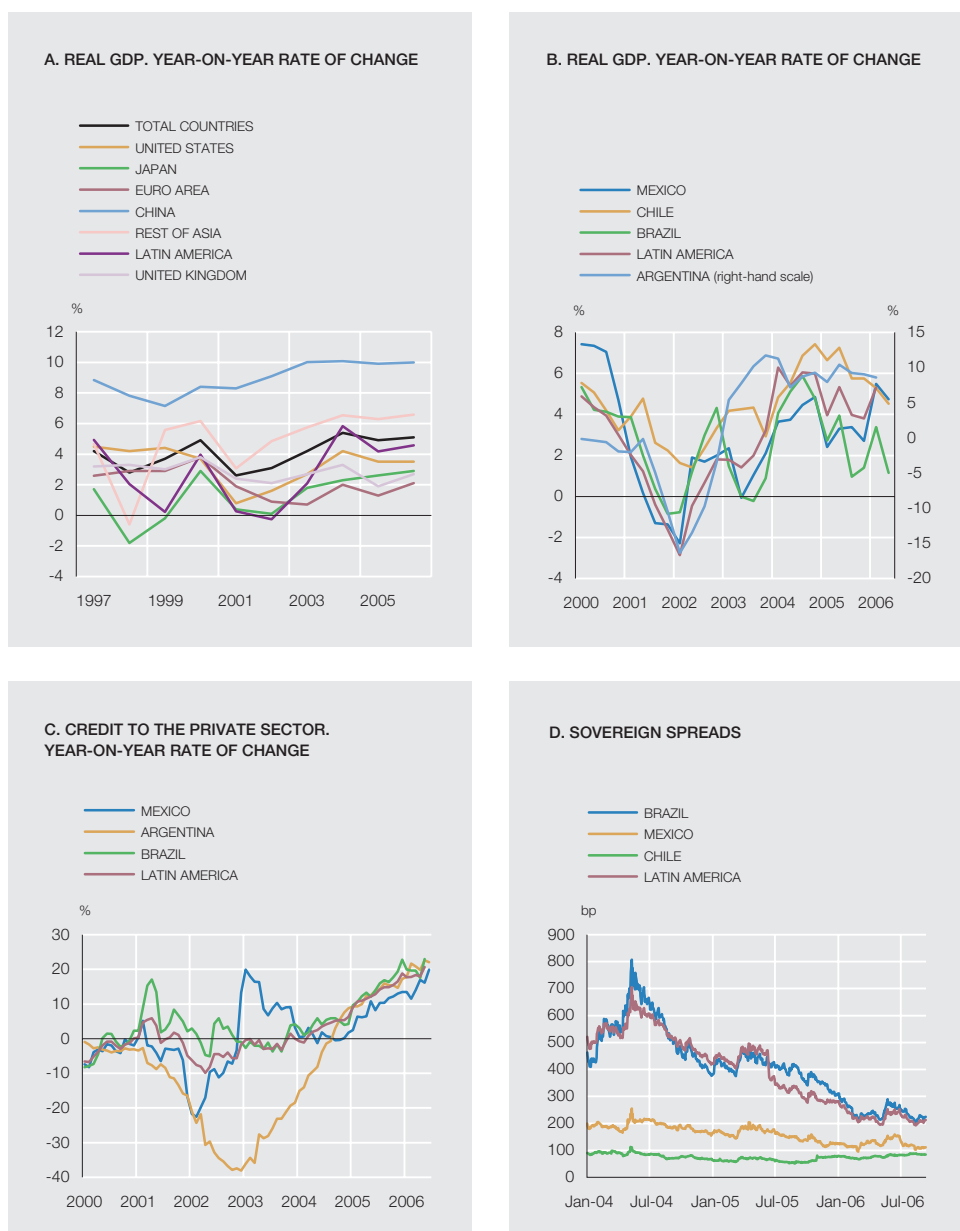


#### B. INTEREST PAYMENTS



SOURCES: Federal Reserve, US Bureau of Economic Analysis, ECB and Banco de España.

a. Until 1999 the Sectoral National Accounts data correspond to the CNE with base year 1995. From 1999 they correspond to the CNE base year 2000.



SOURCES: IFS and Datastream.

pected worsening of price behaviour in June which took the year-on-year change to 2.5%, exceeding the target of 2%. House prices continued their unexpected recovery in train since the beginning of the year.

In *China* GDP growth picked up in 2006 Q2 to 11.3% in year-on-year terms. The risk of overheating prompted the adoption of restrictive policy measures. Thus the central bank raised the reference interest rates on loans by 54 bp and those on deposits by 27 bp, tightened mortgage financing conditions and increased the bank reserve ratio. Inflation held at particularly low levels (1.3% year-on-year in August). The renminbi continued to appreciate very slightly against the US dollar through to mid-September and foreign reserves reached USD 954 billion in July.

In *Latin America*, activity accelerated again in 2006 Q1 with respect to the second half of 2005 and the year-on-year growth rate reached 5.4% (Chart I.7B). However, at 4.1%, the Q2 rate

In May 2006 an episode of financial instability affected financial markets worldwide, and emerging markets in particular, although the first signs of recovery became apparent by mid-June and have continued to strengthen to the present date in most economies.

Chart A plots the S&P500 (VIX) implied volatility index, whose behaviour tends to be associated with markets' risk aversion or appetite, since it correlates very closely with corporate and sovereign credit spreads. The behaviour of the VIX index illustrates how the May financial instability was of limited duration and scope compared with past episodes like the Asian, Russian and Argentine crises and Brazil's difficulties in 2002. Nevertheless, it is the largest rise in volatility in the last three years, a period which has in fact been characterised by a decreasing trend in volatility, generous global liquidity and, from 2004 onwards, a prolonged but very gradual and predictable upward movement in official interest rates in the US. In addition, it was of a markedly global nature, since it affected practically all the financial assets in the three emerging regions, in the stock markets of the industrialised countries and in the commodity markets.

One of the possible reasons for this movement in the markets was increased uncertainty as to the direction of US monetary policy, against a background characterised by prospects of lower global liquidity based on greater monetary rigour in other economies, such as Japan and the euro area, which joined the US in raising interest rates. This perception of greater uncertainty in the markets led to a sharp correction in the value of higher-risk assets, particularly those which has shown higher rises in the preceding months. As a knock-on effect, assets traditionally considered as a refuge, such as bonds and the US dollar, tended to appreciate temporarily. This flight to assets carrying lower risk and the global nature of the correction distinguish this episode from that of March 2006, when a revision of the global liquidity outlook prompted the close-out of speculative positions funded in yen in certain markets, particularly Iceland and New Zealand, thereby causing a certain disruption and significant price falls in these markets.

In May the developed markets reacted with a strong stock market correction. It was more marked in Japan with falls in this period of

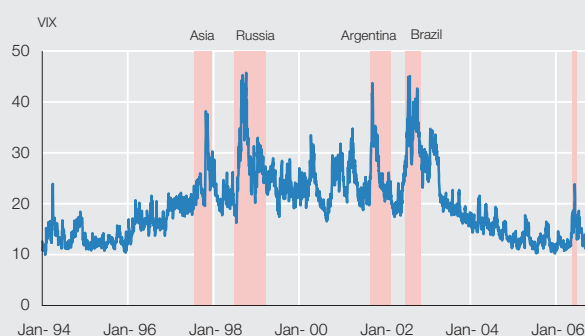
around 19%, while Europe and the US dropped by 13% and 8%, respectively. Stock markets in the emerging countries also fell. The MSCI emerging markets index was down by around 25%, although in countries such as Colombia and Turkey the equity markets fell by around 70% and 35%, respectively. Also, sovereign spreads widened, as shown by the increase of around 60 bp in the EMBI+. As regards regions, the EMBI Global Europe index was more affected than the other regions because of the influence of Turkey. Furthermore, many emerging country currencies depreciated, including most notably once again the depreciation of the Turkish lira (20%), and of the Brazilian real (13%), while the US dollar appreciated symmetrically by around 3% during the period of instability. Another symptom of the flight to lower-risk assets was the decrease in bond yields in the US, Europe and Japan, down in all three cases by around 20 bp, which, as in March, coincided with the settlement of certain carry trades<sup>1</sup> in currencies like the Japanese yen. Finally, many commodity prices fell, particularly those of metals, which in the case of gold and silver underwent corrections of 24% and 19%, respectively. The reaction of oil was more limited (a fall of 5%).

Chart B, which plots the current account balance as a percentage of GDP of different emerging countries against the highest depreciation undergone from January to August 2006, shows that the emerging countries with an extreme position, i.e. higher deficit and weaker economic fundamentals, such as Turkey or Hungary, were those that underwent sharper changes in their financial variables in the period of turmoil. This is also to be seen for other countries, such as Iceland or New Zealand, which had already experienced volatility in March.

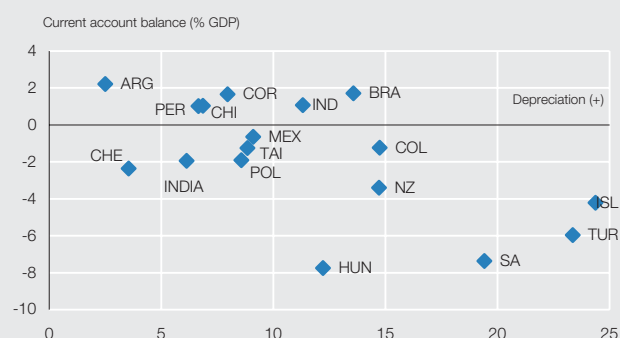
In any event, the rest of the emerging countries have now recovered totally or are near to it. This recovery gathered strength in most countries during the month of June as the uncertainty regarding the course of US monetary policy dissipated.

1. A carry trade is considered to be an investment strategy that consists of financing in a low-interest currency (e.g. Japanese yen) the acquisition of an asset in another, higher-interest currency (e.g. US Treasury bonds).

A. IMPLIED VOLATILITY, S&P 500 INDEX



B. INTERNATIONAL POSITION AND RATE OF CHANGE OF EXCHANGE RATES



SOURCES: Datastream and Banco de España.

The main conclusion that can be drawn from the financial instability in May and June 2006 is that, despite the influence that investors' perceptions have on the markets and the widespreadness of the movements in the different emerging regions, the capacity for recovery of these markets was patent. This is a positive sign for the performance of the emerging economies. Moreover, this correction took place in a

setting in which ample global liquidity still persisted and, should it reverse in the future, the next recovery from possible crises may not be so swift and widespread. Experience of the May-June 2006 episode has shown that solid economic fundamentals are important and that continuity of development of the different financial systems can benefit financial stability.

returned to that of the second half of 2005. The difference in the region's growth rates in these two quarters can be attributed mainly to the sharp slowdown in the Brazilian economy.

The contribution of domestic demand was 6.5 pp on average in the half. Private consumption remained robust, whereas investment slowed. External demand gradually extended its negative contribution to growth to 2 pp in 2006 Q2, due to the deceleration in amounts exported. Nevertheless, thanks to the favourable trend of the terms of trade, the trade balance of the region widened to 4.5% of GDP and the current account balance improved slightly to a surplus of nearly 2%.

The aggregate inflation of the region continued its gradual moderation, standing slightly above 5% in August. Despite this, monetary policies became more restrictive in nearly all countries in the region, with the notable exceptions of Brazil and Mexico. The aggregate budget deficit of the area held slightly above 0.5 pp of GDP, while the primary surplus was nearly 4% of GDP.

In the first half of the year, bank credit to the private sector in Latin America remained vigorous, and even picked up slightly, lifting the year-on-year rate for the whole of the region in June to more than 20% (Chart 1.7C). The rates accelerated in Mexico, Argentina and Colombia and remained near to 20% in Brazil and around 50% in Venezuela. Other developments included the first signs of a recovery of mortgage lending in Argentina and Venezuela, and the excellent behaviour of this credit item in Mexico.

Sovereign spreads were marked by volatility in May and June (Chart 1.7D), prior to which the regional EMBI reached a historical low around 190 bp. In mid-June, sovereign spreads stood above 250 bp, after which they again narrowed to return to the previous low of the aggregate, although with differences between countries. In the period considered, credit ratings improved in most countries in the region. Additionally, in May Moody's upgraded the rating of all countries in the region due to the adoption of a new assessment methodology.

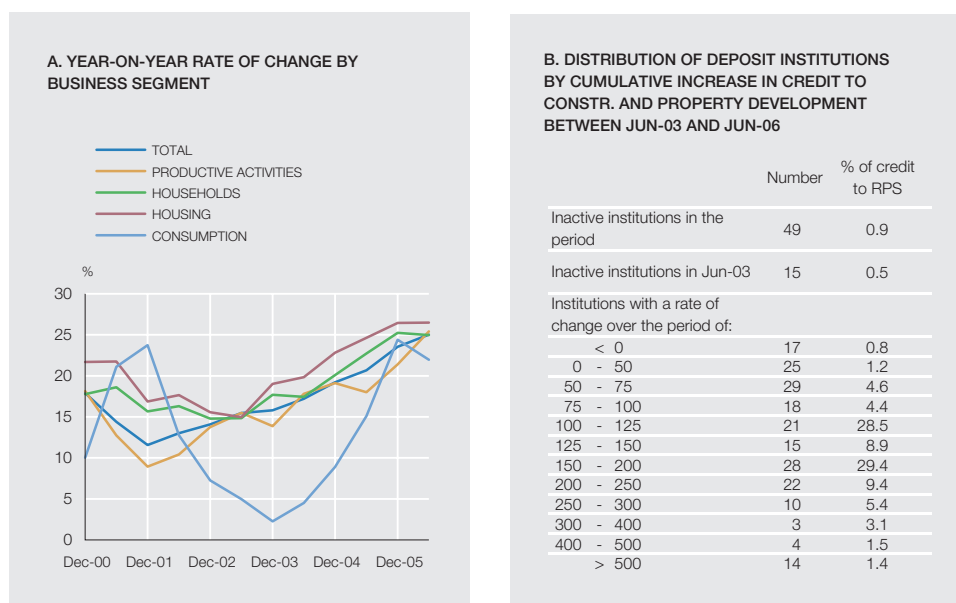
#### 1.2.2 IMPACT OF INSTITUTIONS' CREDIT POLICY

##### Credit growth

Credit to the resident private sector in the total business in Spain of all deposit institutions accelerated further in 2006, largely due to financing extended to firms (Chart 1.8A). House purchase lending was growing in June 2006 at 26.5%, a level very similar to that of December 2005, while consumer finance slowed to 22%, against 24.4% in December 2005. As mentioned in the introduction, the behaviour of financing to firms largely reflects the pick-up in credit to construction and property development firms, but also the substantial acceleration to credit to other firms. In line with these developments, although mortgage credit is growing faster than other credit (27.7% against 19.4% in June 2006, respectively), the latter has accelerated by nearly 7 pp since June 2005.

In general, savings banks exhibit more expansionary behaviour than commercial banks in all business segments, particularly those linked to the real estate sector in the broad sense (fi-

Deposit institutions. ID



SOURCE: Banco de España.

ancing of construction and property development firms and house purchases). Part of the territorial expansion of savings banks in recent years has been based on these business segments.

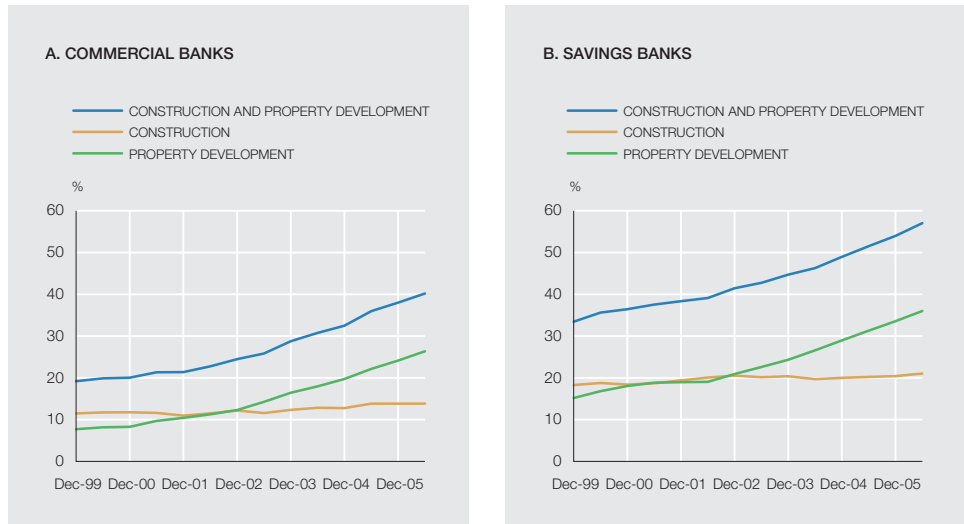
The strong growth of credit to construction and property development firms in recent years, although a trend observed in many institutions, shows a certain dispersion. Thus, in the past three years (Chart I.8B), 72 deposit institutions, with a total market share of 10% of credit to the resident private sector, have raised their exposure to property developers, although without doubling it. In another 64 institutions, with a much higher relative weight (two-thirds of total credit), the expansion of their credit to construction and property development firms was between two- and three-fold. Another 32 institutions, with a market share of slightly less than 15%, multiplied their exposure between three- and four-fold. Finally, twenty institutions, with a market share of 6%, more than quadrupled their exposure.

The strong expansion of financing to construction and property development firms led to the growing concentration of institutions' credit portfolios in this business segment and, in particular, in that of corporate finance (Chart I.1B). There are, moreover, certain differences between the various groups of institutions, with savings banks showing the greatest specialisation in this business segment. Credit to construction and property development firms represents 23% of total credit to the resident private sector in commercial banks compared with 25% in savings banks, while, as a proportion of financing to non-financial corporations, it represents 40% in commercial banks and nearly 60% in savings banks, with property development accounting for 26% of corporate credit in commercial banks and 36% in savings banks (Chart I.9A and B).

Historically, in cyclical upturns, credit to construction and property development firms has shown much higher growth rates than those of other corporate financing (Chart I.10A), but in recessions the problems of doubtful assets have also been greater (Chart I.10B). At present, the growth rate of lending is the highest in the last 20 years, while the doubtful assets ratio is at a low. The Spanish economy in aggregate, and bank risk management in particular, have

**CREDIT TO CONSTRUCTION AND PROPERTY DEVELOPMENT AS A PERCENTAGE OF TOTAL CREDIT TO PRODUCTIVE ACTIVITIES. ID**

CHART I.9



SOURCE: Banco de España.

changed significantly over the period under analysis, which should help to reduce the negative impact of a potential cyclical downturn. Furthermore, as analysed in Chapter III, prudential mechanisms have also improved.

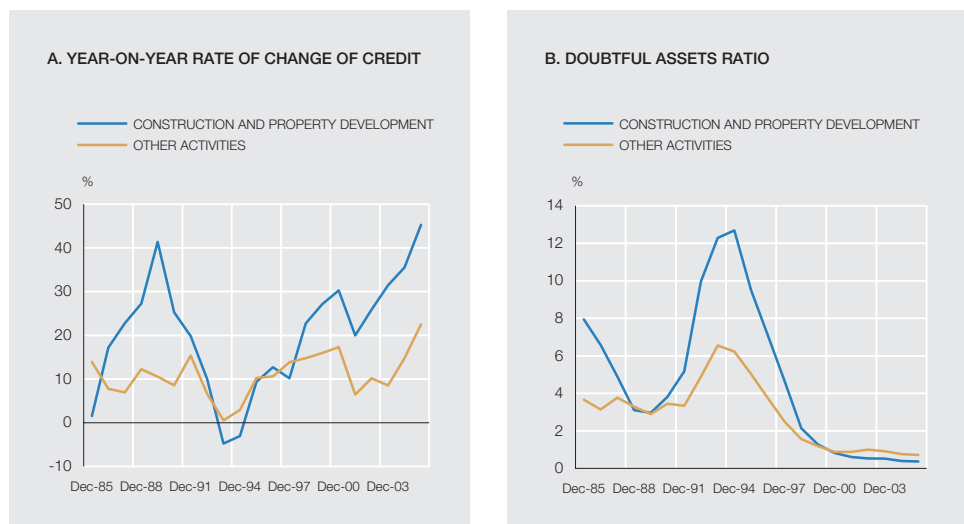
Securitisation

The issuance of covered bonds accelerated substantially in the past year, particularly in savings banks. The volume of covered bonds issued by Spanish credit institutions now exceeds €120,000 million, against €75,000 million a year ago and €50,000 million in June 2004 (Chart I.11A). These bonds represent 14.7% of mortgage loans. Asset securitisation continued growing in 2006 to €100,000 million, and the securitisation of mortgage assets now accounts for 9% of mortgage loans.

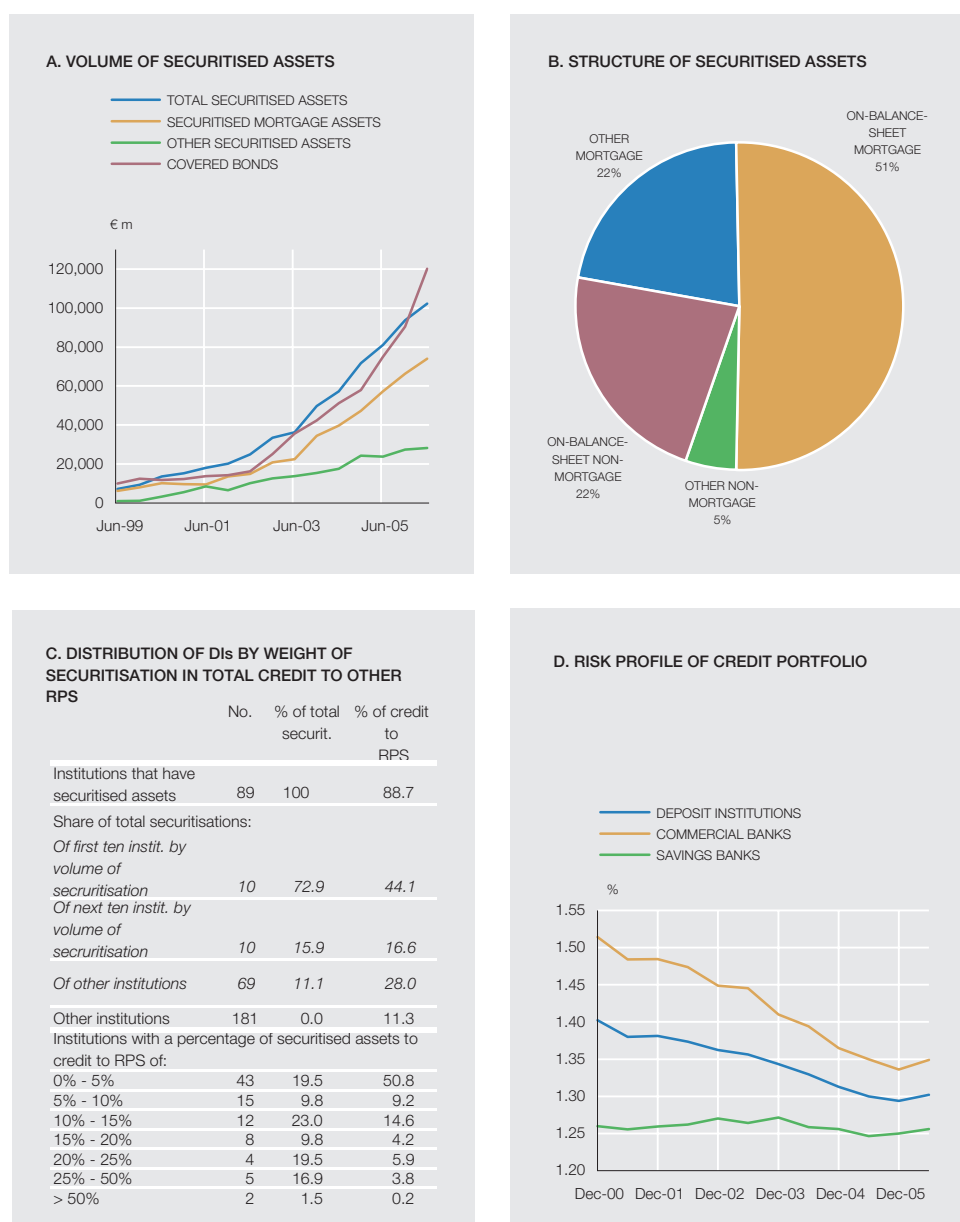
The main reason for asset securitisation in Spain is to obtain liquidity with which to continue financing the vigorous growth of lending. Unlike in other banking markets, in Spain nearly

**YEAR-ON-YEAR RATE OF CHANGE OF CREDIT AND DOUBTFUL ASSETS RATIO**  
Deposit institutions. ID

CHART I.10



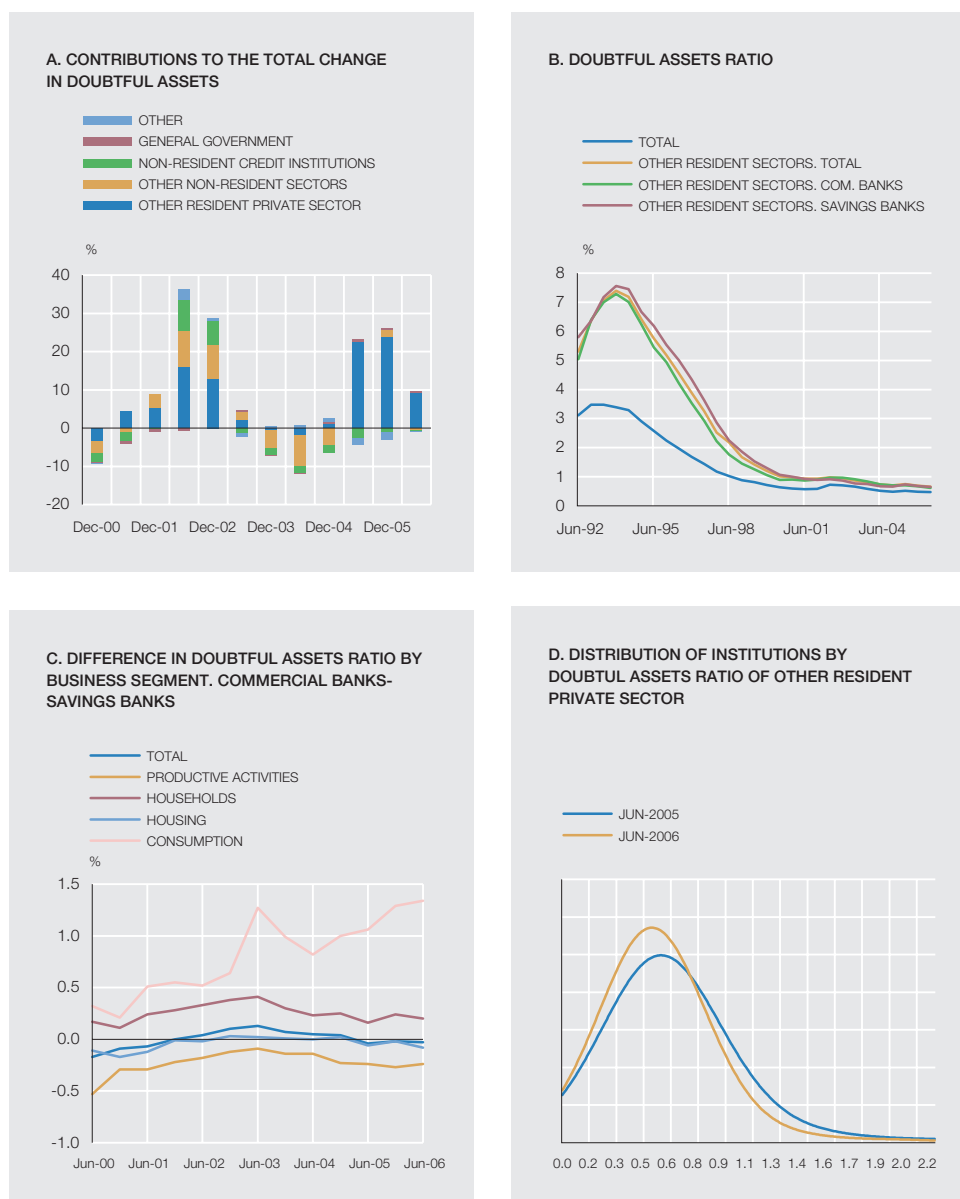
SOURCE: Banco de España.



SOURCE: Banco de España.

three-quarters of the assets securitised by Spanish deposit institutions are kept on the balance sheet, particularly securitisations of non-mortgage assets (Chart I.11B). This indicates that the transfer of risk in these transactions is limited, bearing out the liquidity motive. In addition, with respect to June 2005, the relative weight of those held on the balance sheet has increased by 17 pp.

The sharp increase in asset securitisation is not concentrated in a small number of institutions, but rather can be identified with a widely extended practice (Chart I.11C). In June 2006 a total of 89 institutions, with a market share of nearly 90% of the credit to the resident private sector, had used this instrument. A significant portion of the volume securitised (40%) was issued by 11 institutions with a market share in terms of credit to the resident sector of only 10%. These institutions have now securitised between 20% and 50% of their credit portfolio, which indicates their growing specialisation in transactions of this kind, and probably also their need to



SOURCE: Banco de España.

obtain liquidity to keep up their rapid credit expansion. The larger institutions' portfolios have a lower degree of securitisation, generally less than 5%. Also, the issuance of covered bonds is more concentrated in a small number of large institutions.

Risk profile of the credit portfolio

In the first half of 2006, the risk profile of the credit portfolio of institutions increased slightly to stand at 1.3% (Chart I.11D): 1.35% for commercial banks and 1.26% for savings banks. The increase was slightly higher in commercial banks and can be attributed to the increase in the average exposure, i.e. uncollateralised credit to firms. The pick-up in credit to non-real estate firms in 2006, already mentioned above, explains the change in trend of the risk profile.

Doubtful assets

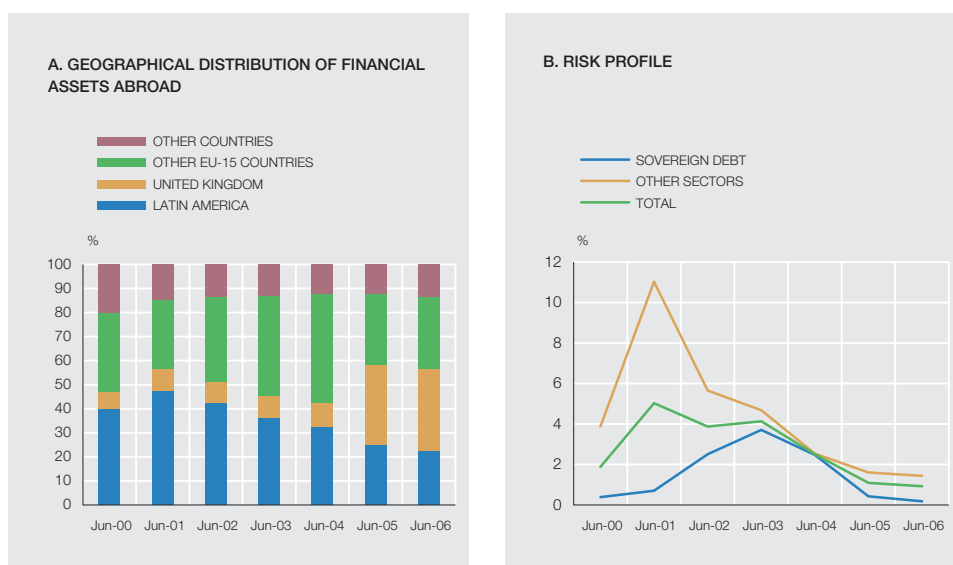
Now that the impact of the change in accounting rules has subsided, in June 2006 the year-on-year change in total doubtful assets in business in Spain stands at 8.7%, which contrasts with the decrease or the absence of change in the period prior to the accounting change (Chart I.12A). The increase in doubtful assets, which can be attributed practically in full to the



## RISK PROFILE AND GEOGRAPHICAL DISTRIBUTION OF FINANCIAL ASSETS ABROAD

CHART I.13

Deposit institutions



SOURCE: Banco de España.

resident private sector, is more pronounced in savings banks (13%) than in commercial banks (8.6%).

Despite a certain increase in doubtful assets, the doubtful assets ratios remained at very low levels (Chart I.12B), as a result of the Spanish economy's positive performance and of credit growth. The difference in specialisation still persisting between commercial and savings banks goes some way to explaining why the doubtful assets ratios of the business segments differ in one and the other group of institutions (Chart I.12C). The doubtful assets of commercial banks are clearly higher in household consumer financing and slightly lower in corporate finance. There are practically no differences in total credit and house purchase credit. Once again, in June 2006 there was a shift in the distribution of doubtful assets ratios towards the origin, which indicates a general, albeit small, decrease in this ratio, given its current levels (Chart I.12D).

Although accurate information is not available on bank consumer financing in the form of small, fast loans, the indirect evidence available seems to point to significant growth in this activity. This business segment involves much higher risk, manifested in doubtful loans ratios well above those of other business segments, and much higher interest rates. Financing via credit cards also expanded sharply. Higher risk premiums are charged in this business to compensate for the doubtful assets ratios significantly above the average for the credit portfolio.

Foreign financial assets

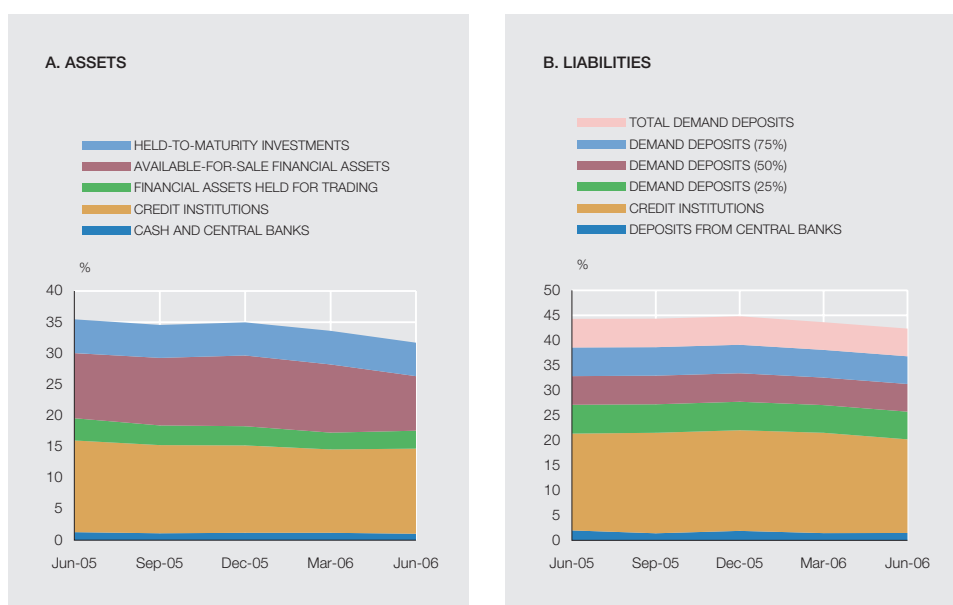
The foreign financial assets of Spanish deposit institutions continued to expand (16.8%) in June 2006, particularly in the United Kingdom and in the other countries of the former EU-15. The favourable situation in Latin America, along with the growing weight (Chart I.13A) of financial assets in relatively low risk areas (Western Europe and the US), explains the favourable trend in the risk profile of foreign financial assets in the first half of 2006 (Chart I.13B).

### I.3 Liquidity risk

MARKETS

The liquidity of the *Spanish debt market* remained steady in general terms. However, the variations in the ratio that measures the turnover of bonds traded in the whole of the market seems to confirm a slightly upward path in liquidity since the beginning of 2005. As regards the execution of transactions, there are no changes calling for comment in regard to the trading

Deposit institutions. ID



SOURCE: Banco de España.

systems used in the market. Thus, in the segment that defines the operations of account holders, around two-thirds of trading is by telephone. By contrast, other indicators point to the growing implementation of electronic platforms used to provide execution services to final institutional investors.

The liquidity indicators of the *stock exchanges* continued the favourable performance noted in previous reports. In year-on-year terms, the cumulative volume of trading up to June 2006 increased by nearly 30%, although a good part of that growth reflected the general rise in stock market prices. Consequently, the average liquidity measured in terms of turnover of stock market capitalisation remained relatively steady at levels around the recent historical highs. As regards the factors complementary to liquidity, it should be mentioned that in the past year, based on the weighted average range of the share prices of the two major banks, these have become the most liquid shares in the Spanish market.

In the *international foreign exchange markets*, the half-yearly surveys conducted in New York and London by the respective exchange market committees evidenced the continuing buoyancy of activity in the two main markets. Specifically, the level of average daily trading in foreign currency spot, forward, swap and option transactions grew by around 20% with respect to that found in the previous survey released in October 2005. In relative terms, the most notable development was the increased activity in exchange-rate forward transactions.

In regard to *institutional developments* concerning market liquidity, mention should be made of the establishment of a special trading segment within the Spanish Stock Market Quotation System (SIBE) for listed mutual funds. One of the features of this new segment is that it adopts the regulation of specialists as compulsory market participants fostering the liquidity of these products. In this respect, the action of specialists should help the market price of these mutual funds to remain within a maximum range, thereby helping to reduce settlement costs. At the date of publication of this FSR, two listed funds had been registered, both tied to the Ibex-35. Box I.3 explains how an *integrated retail payments market* (SEPA – *Single Euro Payments Area*) is being developed in Europe.

The SEPA project<sup>1</sup>, since it is one of the components of the European financial integration programme, is numbered among the political priorities of EU institutions. In its final stage, SEPA will trace out an area in which all euro-denominated payments will be considered domestic thanks to the disappearance of differences between national and cross-border payments. Achieving this objective will require far-reaching reform of the EU's small payments mechanisms and systems, which suffer from a strong national bias and scant integration. The reason behind the SEPA initiative is that a fragmented retail payments system is incompatible with an economic area with a single market and currency.

This fragmentation means that the characteristics and conditions of payment services are determined on the basis of geographical criteria, which is incompatible with market unity, and also that some services readily available in national markets are not available for cross-border transactions.

SEPA is a project that looks to self-regulation and co-operation between authorities and the private sector. Although it owes its origin principally to a political decision<sup>2</sup> and its essential aims coincide with the conception of it laid down by the Eurosystem and the European Commission<sup>3</sup>, its design and management have been entrusted to the banking sector, represented by the European Payments Council (EPC). The European authorities have taken a basically catalytic role. They actively monitor the process, assess progress from the standpoint of the declared objectives, maintain lines of dialogue and co-operation with the sector and promote actions to correct trends that may jeopardise the project. The possible exercise of their regulatory powers is only envisaged as a last resort.

SEPA consists of four basic components: instruments, infrastructure, standards and legal framework. At their present level of development, these suffer from diverse degrees of fragmentation at European level. Since they are closely interrelated, the success of project requires an overall perspective to be taken in dealing with them.

As regards *instruments*, SEPA is concerned with electronic payments. Paper instruments, such as cheques and cash, are outside its scope. The EPC has prepared basic formats for transfer orders and for direct debit and has approved the related regulations governing the interbank relationships that enable payments based on these instruments. It has also approved a general framework for payment cards which, unlike in the former case, does not involve the creation of a new pan-European instrument. This framework consists of a set of general rules and principles that will have to be adopted by the card suppliers and networks wishing to become members of the SEPA community and operate within it. A diversity of approaches is needed because cards are not a strictly banking product and because the card market is

global and operates largely through the networks of the international brands. In any event, the aim is the same as for the other instruments, i.e. that a single SEPA card will enable payments and withdrawals in ATMs throughout the whole area.

The EPC has also prepared an *infrastructure* framework based on the principles of separation of instruments and infrastructures and of interoperability. It sets the basic rules to be met by SEPA instrument processors. This framework, although it includes provision for co-operation between credit institutions and processors, is basically conceived as a domain in which the latter compete with each other to offer their services to the banking community. Interoperability between infrastructures will enable a payment initiated anywhere in the area to reach an addressee anywhere else in it. However, the EPC prefers an infrastructure model known as PEACH<sup>4</sup>, i.e. a single clearing house able to offer a pan-European service on its own.

The existence of standards and their widespread use is a necessary condition for efficiency and security. The Eurosystem considers their existence and adoption as essential for the overall success of the project. Without them it will not be possible to automatically process payments from beginning to end<sup>5</sup>. Standards exist for instruments, messages and infrastructures, but they are not compatible across countries. In this phase of the SEPA project there is nothing that resembles regulations or frameworks. The EPC is devoting considerable efforts to make headway in this respect and, although much work remains to be done, some notable steps have been taken, such as the decision to adopt the ISO 20022-UNIFI message standard and a language based on XML. Work is also proceeding on identifiers of accounts and institutions and on security standards.

The regulatory compartmentalisation of payments in Europe constrains their integration. To remedy this, a proposed directive on payments for the internal market was recently adopted by the EC to put into place a *harmonised legal framework* for retail payments in the area that will accompany the start-up of the SEPA. It is being debated in the Council of the European Union and in the European Parliament and is expected to be approved in 2006 for entry into force at the same time as the SEPA comes into operation. Its new features include most notably provision for the possibility that so-called payment institutions, which are not credit institutions, can operate in this market and thus contribute to improving its competitiveness and efficiency.

Finally, it should be noted that the SEPA timetable includes two particularly important dates:

- On 1 January 2008 the “SEPA for citizens” is scheduled to come into operation. The banking industry has to have the new instruments ready so that the citizens that so desire

1. Acronym of “Single Euro Payments Area”. 2. Regulation (EC) No. 2560/2001 of the European Parliament and of the Council on cross-border payments in euro. 3. See “Single Euro Payments Area. Joint statement from the European Commission and the European Central Bank”. May 2006.

4. Acronym of “Pan European Automated Clearing House”. 5. Including interbank and bank-customer relationships.

can use them in all their domestic and cross-border payments.

- On 31 December 2010 the “SEPA for infrastructure” is scheduled for completion. Although in January 2008 the existing infrastructures will be ready to process the old national instruments and the new SEPA ones, they will only have the obligation to process SEPA payments in all the euro area three years later, for which purpose they have to be interoperable. On this date, a critical mass of national payments should have migrated to SEPA, so that the process will be irreversible.

It is therefore essential to manage the migration to SEPA. It will be organised for each national community<sup>6</sup> taking into account its local circumstances but from the perspective of the common objective. The process is extremely complex. Like an enormous jigsaw puzzle, the many separate national pieces will have to be fitted together to form the pan-European market. The national central banks, in their capacity as members of the Eurosystem, have a key role to play in promoting and co-ordinating the migration processes.

6. The national communities include all the agents involved in retail payments: banking system, government, companies of all types and individuals.

## INSTITUTIONS

The balance sheet analysis in Section I.1.2 identified the growing separation between the behaviour of credit to firms and households and that of deposits received from them. The last few FSRs have stressed this phenomenon, which explains the growing need of institutions to resort to the European interbank market or to the international capital markets.

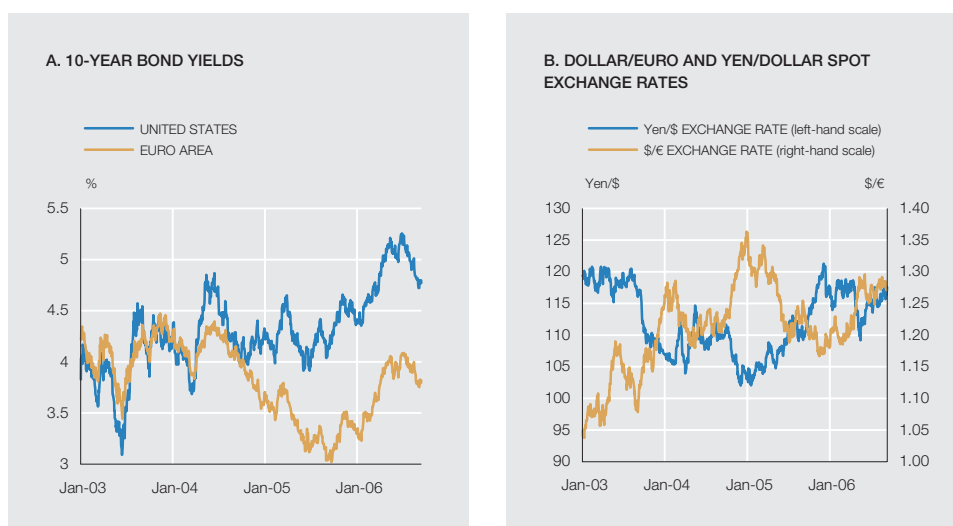
Further insight can be gained by analysing the degree of liquidity of institutions' financial assets and liabilities. The relative weight of liquid assets in the balance sheet total in business in Spain has decreased slightly in the past year (Chart I.14A). Nearly two-thirds of these assets are highly liquid (cash, deposits in other credit institutions and in the central bank, and financial instruments forming part of the trading portfolio). Ordering liabilities by degree of liquidity is more complicated due to the difficulty in measuring accurately the degree of liquidity of sight deposits, since these theoretically have the highest liquidity but in the customary business of institutions they are highly stable. In any event, in the past year the most liquid liabilities have shown high stability in deposit institutions as a whole (Chart I.14B).

Analysis of the liquidity gap using information on remaining terms of assets and liabilities reveals a very significant long position (more than 15% of assets) in transactions with maturities of more than five years, even if 75% of sight deposits are included in liabilities. This is evidence of the growing importance of long-term credit transactions, which are largely linked to household credit for house purchases. The lengthening of the average remaining term of credit and, in particular, of mortgage credit, further confirms these developments.

### I.4 Market risk

#### MARKETS

The most notable aspect of the behaviour of international financial markets since the last FSR was the *volatility* in May, which significantly clipped the prices of the higher-risk financial assets (stock exchanges and sovereign spreads of emerging countries) and their subsequent recovery from June. During this time there was a high degree of uncertainty regarding the behaviour of official interest rates in the US. On the one hand, the announcements of the Federal Reserve pointed to a pause in the upward march of rates because the data showed a slowdown in activity. On the other, since the indicators of activity remained relatively robust and the inflationary pressure heightened, it was not evident that this pause was imminent, while at the same time doubts emerged about the level at which the upswing in official interest rates would end. Finally, the Federal Reserve again raised interest rates by 25 bp to 5.25% in June, although the upward cycle was broken in the August meeting. Subsequently, the expectations about interest-rate movements were reaffirmed, the signs pointing to an end to the cycle in June and even the possibility of a reduction in official interest rates at the beginning of 2007. Hence the markets recovered most of the losses seen in May.



SOURCE: Datastream.

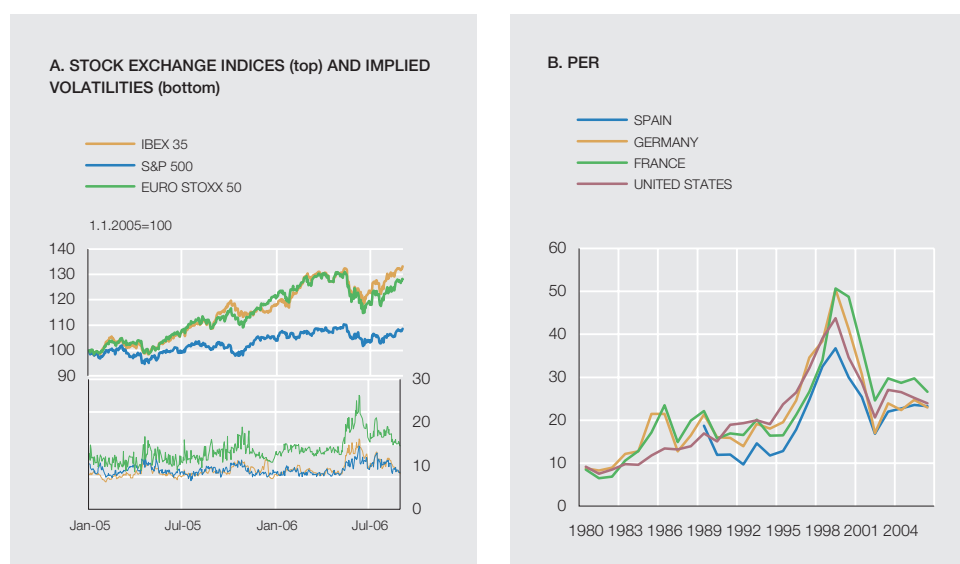
The interest rates negotiated in the *euro area money markets* continued to increase, reflecting both the successive increments in benchmark interest rates by the ECB this year and the market's expectation of further rises. Thus one-year Euribor rose by 80 bp from December 2005 to reach an average value exceeding 3.6% in August.

Also notable was the behaviour of *long-term interest rates* (Chart I.15A). After some months in which these trended gently upwards towards levels considered more in line with the high pace of activity and the raising of official interest rates in May, which coincided with the period of turmoil and the consequent flight to quality, this trend reversed in July. Thus in the United States the 10-year interest-rate fell to 4.80%, compared with 5.20% in the first week of July, producing once again a significant negative slope of the term structure of the yield curve. This movement was also observed, albeit less markedly, in Japan, where expectations regarding official interest rates were revised downwards, and in the euro area.

The *public debt secondary markets* of the euro area also saw widespread increases in yields, albeit more moderate at longer maturities, which subsequently reversed in part. Hence long-term interest rates in the euro area stood at around 3.8% in mid-September, 40 bp higher than at end-2005. The spread between US and German debt narrowed slightly to stand at less than one percentage point at that date.

In the *foreign exchange markets* of the industrialised countries, the most notable development was the depreciation of the yen following the revision of interest rate expectations in Japan (Chart I.15B).

The euro area *stock exchanges* were marked in the first half by the sharp fall in prices in May and June, which interrupted the upward path of the preceding months (Chart I.16A). These movements, which were sharpest in the United States, and were also manifested in a notable rise in volatility, seemed to reflect increased uncertainty about the international macroeconomic outlook and the changes in the US monetary policy stance, against a background characterised by strong sharp oil price rises and by the persistence of global imbalances. In subsequent months, however, a process of normalisation led the main indices to initiate a path of recovery that took them to levels near to and, on occasions, above those recorded in the period immediately preceding the turmoil. Furthermore, the volatility subsided, although at the



SOURCES: Datastream and Bloomberg.

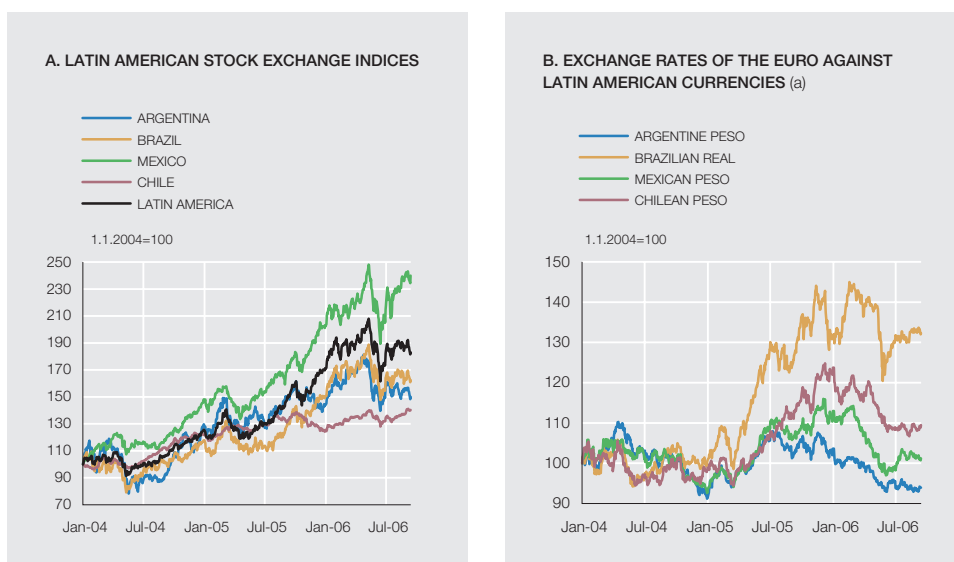
beginning of September it was generally still somewhat above the levels prior to its appearance (Chart I.16A).

Following these movements, by mid-September the broad Euro Stoxx index of the euro area stock exchanges posted cumulative gains of 6.3% since the beginning of the year, an appreciation similar to that registered by the S&P 500 of the US stock exchanges in the same period (5.6%). The Spanish indices behaved more favourably. Thus at the same date the Madrid Stock Market General Index stood 14.9% above its value at the end of the previous year. The rises in the Spanish stock markets, although widespread, displayed a certain unevenness. Notable in this respect was the rise in market prices in basic materials, industry and construction (27.5%), compared with more moderate rises in technology and communications (5%), and the lack of change in consumer services.

Despite this market price behaviour, the continued high growth rates of corporate profits led to moderate decreases in price-earnings ratios (ratio of price to earnings per share) in the major stock exchanges, although these declines were smaller in the Spanish markets (Chart I.16B). Nonetheless, these indicators continued to exceed their historical averages.

In *Latin America*, the stock market performance in recent quarters was also marked by the financial volatility in May-June. Before then, the stock market indices of the main countries in the region recorded historical highs (Chart I.17A). In May and June the equity markets posted a sharp fall, which for the regional MSCI index was 22% in local currency. The recovery from the financial volatility was swift and robust, especially in Mexico, although in countries such as Argentina and Brazil the mid-May highs were not reached again.

Like the stock exchanges, the foreign exchange markets also felt the impact of the financial turmoil (Chart I.17B). Before the turmoil, in early 2006 the Brazilian real was the only currency that continued to show the nominal appreciation that the other currencies of the region had exhibited against the euro in the preceding quarters. Since the end of the financial turmoil, most of the currencies have appreciated, although only the Brazilian real has rebounded to its previous levels. This interruption of the appreciating trend of various currencies was welcomed



SOURCES: Datastream and Bloomberg.

a. Exchange rates: a fall indicates a depreciation of the local currency against the euro

in certain cases, since the fears of excess currency appreciation were becoming evident in some sectors.

#### INSTITUTIONS

In view of the figures published by some of the large European banks, the risks associated with the trading portfolio in regard to the tier 1 capital of these institutions do not generally seem to have increased significantly compared with the average levels of 2005. However, the absolute levels of daily VaR estimated for the trading portfolio are subject to greater fluctuation, depending on the specialisation of each institution, as a result of the stock market volatility in May and June and of the bond market volatility in some emerging countries.

In the case of the larger Spanish institutions for which data are available, the VaR represents less than 0.15% of tier 1 capital, which is indicative of the low weight of market risk in the total risk of deposit institutions. However, in absolute terms, the daily VaR estimated for a confidence level of 99% seems to have become more variable since mid-2005<sup>5</sup>.

5. Note that the estimated levels of VaR at any time show an appreciable degree of volatility and are therefore not necessarily a good indicator of the course that market risk will follow in the immediate future.





## II Profitability

Spanish deposit institutions capitalised on the favourable economic environment in which they were operating to consolidate the positive trend in their results<sup>1</sup>. Profit growth was based not only on the increase in activity, but also on efficiency. Net operating income therefore increased in absolute terms, as seen in previous FSRs, and also relative to average total assets (ATA).

### II.1 General situation

The group net income of Spanish deposit institutions grew in the period to June 2006 by 38.5% (see Table II.1). This increase confirms the positive trend observed in previous FSRs, although the accounting criteria introduced by Banco de España Circular CBE 4/2004, in order to apply International Financial Reporting Standards, can be expected to increase the volatility of the rates of change of the results<sup>2</sup>.

The higher growth in group net income relative to equity (14%) means that the ROE rose from 16.3% in June 2005 to 19.8% in the same month this year. The difference between the ROE and the yield on Spanish public debt widened again (Chart II.1A). However, any assessment of the high level of profitability should take into account the potential risk incurred and the high growth of activity in recent years.

The increase in the ROE<sup>3</sup> (see Chart II.1B) was a result of the improvement in efficiency and the reduction in leverage, along with a smaller deduction in the final part of the income statement (the increase in asset impairment allowances was offset by the sale of holdings and the smaller provisioning expense), an increase in the risk profile and a decline in the weight of capital and reserves in total regulatory capital<sup>4</sup>. Meanwhile, the return on assets (ROA) also increased, both when calculated using group net income (from 0.88% to 1.02%) and when using profit before tax (from 1.21% to 1.36%).

Net interest income continued to display a favourable trend in absolute terms, growing by 16%. However, the strong growth in activity and the continuing low levels of interest rates<sup>5</sup>, despite their increase in Q2, help to explain why, in terms of ATA, net interest income fell by 5 bp (Chart II. 2A).

The trend in net interest income was the result of growth in financial revenue of 23.2% (13 bp in terms of ATA). The latter was mainly attributable to the increase recorded in revenue arising from lending, which largely reflected highly buoyant financing to the private sector (see Chapter I). The revenue from lending, together with similar income arising on capital instruments and deposits in credit institutions, offset the negative trend in revenue obtained from debt securities. At the same time, financial costs grew by 29.1% (18 bp in terms of ATA), driven by the increases in the remuneration of the deposits of households and businesses and of credit in-

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1. This and the following chapter of the FSR do not include the branches of foreign banks based in the other European Union countries, as they are not subject to capital requirements in Spain. The number of institutions analysed in both chapters is therefore the same. In any event, the relative weight of the institutions excluded is very small. 2. In the first half of 2006 a large Spanish deposit institution obtained significant capital gains from the sale of some of its holdings. If these atypical sales are excluded, subject to the limitations of an estimate of this type, the group net income would have grown in June 2006 by around 26%, which confirms the high profitability of Spanish deposit institutions. 3. There is a detailed explanation of the breakdown of the ROE in Box II.1 of the May 2004 FSR. 4. Note that the introduction of CBE 2/2006 on 30 June 2006 means that the allowance for insolvency risk is included in tier 2 capital. Accordingly, tier 2 capital was significantly higher in June 2006 than a year earlier, and this affected the breakdown of the ROE, tending to reduce the measures of leverage and of the quality of equity. 5. Box II.1 analyses the degree of dispersion of interest rates across institutions by product in the Spanish banking market.

## INCOME STATEMENT

Deposit institutions

TABLE II.1

	JUN-06	% CHANGE JUN 06/ JUN 05	% ATA JUN-05	% ATA JUN-06
	€ m	(%)	(%)	(%)
Financial revenue	49,953	23.2	4.00	4.13
Financial costs	28,638	29.1	2.19	2.37
Net interest income	21,315	16.0	1.81	1.76
Share of profit or loss of entities accounted for using the equity method	2,062	6.9	0.19	0.17
Net commissions	9,728	16.6	0.82	0.80
Gains and losses on financial assets and liabilities	4,152	55.3	0.26	0.34
Gross income	37,257	19.0	3.09	3.08
Operating expenses	18,398	9.4	1.66	1.52
Other operating income	796	34.9	0.06	0.07
Net operating income	19,655	30.3	1.49	1.62
Asset impairment losses	3,853	51.1	0.25	0.32
Provisioning expense (net)	825	-52.7	0.17	0.07
Other income (net)	1,555	3.3	0.15	0.13
Profit before tax	16,497	34.6	1.21	1.36
Net income	13,127	38.5	0.94	1.08
Memorandum item:				
Group net income	12,364	38.5	0.88	1.02

SOURCE: Banco de España.

stitutions, but especially by the issuance of marketable securities and subordinated liabilities, at a significantly higher average cost than customer deposits.

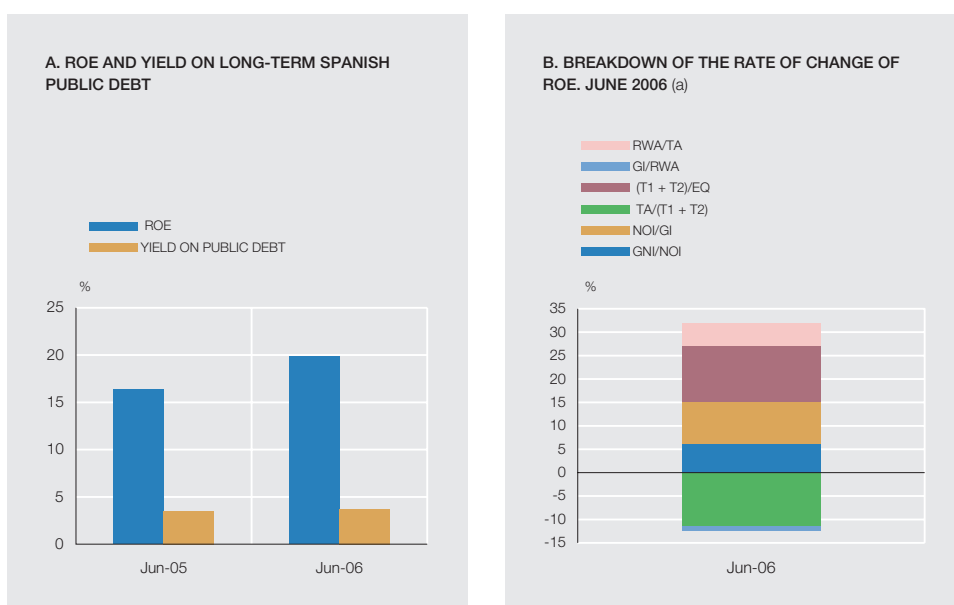
The results of investee companies were generally favourable, which helps to explain why the contribution of the firms accounted for using the equity method<sup>6</sup> grew in June 2006, albeit moderately (6.9%). In terms of ATA, this moderation meant that the results of these firms fell by 2 bp with respect to the same period of the previous year, to 0.17%.

Net *commissions*, meanwhile, were more buoyant, growing by 16.6%. Increases were recorded in respect of all products. Commission revenue arising from the provision of securities services and the marketing of non-banking financial products grew by 18.2%, especially because of the trend in the latter, against a background of continuing buoyancy in insurance and mutual funds sales. The commissions charged for contingent exposures and commitments grew by more than the total (18.5%). Meanwhile, despite the rate of growth of activity, commissions for collection and payment services, which continued to be the most important item within total revenue (38%), grew moderately (11.9%). This may be partly attributable to an increase in competition between institutions in this business segment. In any event, despite the growth of commissions in absolute terms, relative to ATA commissions in respect of all products suffered a slight reduction in weight, so that net commissions fell by 2 bp to 0.8%.

There was a sharp increase in *gains and losses on financial assets and liabilities* (55.3%) which, in terms of ATA, translated into growth of 8 bp, to 0.34%. The notable decline in the held-for-trading portfolio, explained partly by the bout of turbulence in the financial markets in

6. That is to say associates (over which a significant influence is exerted, though not enough for them to be subsidiaries), jointly controlled companies and group companies (mainly insurance and non-financial companies that do not form part of the consolidable group of credit institutions).

Deposit institutions



SOURCE: Banco de España.

a.  $(T1 + T2)/EQ = (\text{tier 1} + \text{tier 2})/\text{equity}$ ;  $TA/(T1 + T2) = \text{total assets}/(\text{tier 1} + \text{tier 2})$ ;  $RWA/TA = \text{risk-weighted assets}/\text{total assets}$ ;  $GI/RWA = \text{gross income}/\text{risk-weighted assets}$ ;  $NOI/GI = \text{net operating income}/\text{gross income}$ ;  $GNI/NOI = \text{group net income}/\text{net operating income}$ .

May and June, was partially offset because losses were no longer recorded in respect of other gains and losses on financial assets and liabilities. In any event, the increase in gains and losses on financial assets and liabilities was largely attributable to the capital gains obtained by certain institutions from the sale of some of their holdings.

As a result of the foregoing, *gross income* increased by 19%. As seen in Chart II.2B, it was net interest income, its main component, which made the largest contribution to its growth (9.4 pp). In second place, on account of their strong growth, were gains and losses on financial assets and liabilities (4.7 pp), and making a similar contribution, owing to their higher relative weight, were net commissions (4.4 pp). The favourable trend in absolute terms meant that, relative to ATA, they only declined by 1 bp with respect to June 2005, to 3.08%.

*Operating expenses* increased by 9.4%, more slowly than activity (in terms of ATA they fell by 14 bp, to 1.52%). This increase was smaller in the case of business in Spain. By component, personnel costs grew by 9.1%, overheads by 9.3% and depreciation by 11.3%. However, the higher relative weight of the former explains why their contribution to the total growth rate was largest (see Chart II.2C). The *efficiency ratio*, which shows the percentage of gross income absorbed by operating expenses, improved again, falling by 4.3 pp to 49.4% (see Chart II.2D). This improvement was partly a consequence of the increase in activity, given the institutions' cost structure. A slowdown in banking activity would cause the efficiency ratio to deteriorate, owing to the weight of fixed costs in total operating expenses.

As a result of the positive trend in gross income and the moderate increase in operating expenses, relative to activity, *net operating income* grew by 30.3% in absolute terms (Chart II. 3A). This buoyancy meant that the margin also increased as a proportion of ATA, by 14 bp, to 1.62%.

The ECB has recently published a study of the possible reasons for the dispersion of bank interest rates in the euro area<sup>1</sup>. The study uses data on the interest rates on new loans and deposits for different maturities, harmonised for all the countries of the area, collected by the respective national central banks since January 2003. The conclusion is that, despite forming part of a single monetary area with freedom of transaction and location, the cross-country differences in average rates remain. The ECB explains the dispersion of rates by the heterogeneity of the cross-country supply and demand conditions, by the differences in credit risk and by the differences in regulations and levels of competition.

This box presents the results of the study of interest-rate dispersion within the Spanish market, using the same harmonised data that the Banco de España collects to compile the indicators that are subsequently analysed for the euro area as a whole. Accordingly, what is being analysed here is *interest-rate dispersion across institutions within Spain*.

Table A shows the *average interest rates* offered by deposit institutions for various banking products during the period 2003-2006, weighted by the volume of business in order to avoid the prices of small transactions having a significant influence on the calculation of

the statistic. Deposit rates are seen to have approximated the inter-bank rate to a greater degree than lending rates, with the exception of the current accounts of both households and non-financial corporations. In the case of loans, part of the differential must cover the risk premium.

The main differences in the levels of interest rates across types of product, in the case of both deposits and loans, partly stem from differences in liquidity and risk. Thus, for example, the higher risk of consumer loans compared to mortgage loans for house purchase may explain the higher average rate on the former compared with the latter (note Chart I.1C). Therefore, a higher average interest rate does not necessarily mean that the product must be more profitable as there may be a greater cost in the form of risk for the institutions<sup>2</sup>.

The dispersion of interest rates across institutions is assessed using the *coefficient of variation (CV)*, i.e. the ratio between the (weighted) standard deviation and the (weighted) average of interest rates. The positive values for the CV in Table A confirm that there is also price dispersion across banking products in the Spanish market. Current accounts are the product with the highest level of dispersion across institutions by far. At the same time, the distribution of the interest

1. "Differences in MFI interest rates across euro area countries", ECB. September 2006.

2. Risk premiums play a very important role in the analysis of welfare in the credit market, as shown by the forthcoming paper by Martín-Oliver, Salas and Saurina, "Risk premium and market power in credit markets", in *Economics Letters*.

#### A. AVERAGE INTEREST RATE AND DISPERSION OF INTEREST RATES ACROSS INSTITUTIONS

			AVG. (%)	COEFFICIENT OF VARIATION						
				2003	2004	2005	2006 (b)	AVG. (%)		
DEPOSITS	HOUSEHOLDS	Current accounts	0.61	0.83	0.82	0.90	0.98	0.88		
		Time deposits	Less than 1 year	2.14	0.32	0.39	0.45	0.35	0.38	
			From 1 to 2 years	2.13	0.25	0.23	0.26	0.23	0.25	
	More than 2 years		2.23	0.29	0.22	0.28	0.28	0.27		
	NON-FINANCIAL FIRMS	Current accounts	0.79	0.58	0.57	0.56	0.54	0.56		
		Time deposits	Less than 1 year	2.15	0.16	0.19	0.14	0.13	0.16	
			From 1 to 2 years	2.23	0.17	0.26	0.27	0.23	0.23	
			More than 2 years	2.47	0.18	0.22	0.30	0.36	0.27	
	LOANS (a)	HOUSEHOLDS	Consumer loans	Less than 1 year	8.42	0.43	0.42	0.45	0.40	0.42
				From 1 to 5 years	7.52	0.24	0.25	0.31	0.27	0.27
More than 5 years				7.25	0.11	0.08	0.17	0.20	0.14	
Housing loans			Less than 1 year	3.37	0.13	0.08	0.06	0.08	0.09	
			From 1 to 5 years	3.57	0.15	0.21	0.20	0.26	0.21	
			More than 5 years	4.82	0.28	0.36	0.38	0.37	0.35	
Other loans		Less than 1 year	4.33	0.22	0.19	0.17	0.13	0.17		
		From 1 to 5 years	4.75	0.19	0.25	0.31	0.23	0.25		
		More than 5 years	5.26	0.24	0.22	0.28	0.27	0.25		
NON-FINANCIAL FIRMS		Loans of less than 1 million euros	Less than 1 year	3.93	0.14	0.13	0.13	0.12	0.13	
			From 1 to 5 years	4.38	0.19	0.27	0.25	0.16	0.22	
			More than 5 years	4.12	0.23	0.28	0.30	0.20	0.25	
		Loans of more than 1 million euros	Less than 1 year	3.04	0.12	0.11	0.10	0.10	0.11	
			From 1 to 5 years	3.09	0.18	0.22	0.19	0.16	0.19	
			More than 5 years	3.68	0.27	0.26	0.19	0.17	0.22	

SOURCE: Banco de España.

a. The interest rates of loans are variable and the time period refers to the initial rate fixation.

b. Data available until July 2006.

rates applied in more homogenous products, such as mortgage loans with an initial rate fixation of less than one year, is concentrated around the average with a standard deviation of only 0.09 times such average. The dispersion does not show a clear trend during the period considered, since it rises or falls according to the type of product and the term considered<sup>3</sup>.

Table A shows clearly that interest-rate dispersion is also evident within the same country, with the same regulations and the same intensity of competitive conditions for all the institutions. Therefore, differentiation of the product and service that the institutions offer their customers should be included among the reasons for dispersion, so

3. The coefficient of variation presented in Table A is greater for all products than that presented in the ECB report because the differences in interest rates are measured, in the first case, across institutions belonging to the same country, and in the second, across countries. To construct the latter, the interest rates of the institutions operating in a single state are aggregated into a single figure, which is taken as the interest rate of the country that is used to calculate the dispersion across Member States. Thus, the statistics that seek to capture cross-country price differences ignore the heterogeneity of interest rates across institutions in each country.

that price differences, in the end, largely correspond to differences between products. The local character of the markets for retail bank services and the existence of costs of searching for the best possible price<sup>4</sup> may also have a bearing.

The foregoing gives rise to two final reflections. First, the need to treat indicators of price dispersion with caution when assessing the degree of integration of a financial market that extends beyond one country<sup>5</sup>. Second, and related to the foregoing, the need for an appropriate definition of financial integration in retail banking markets, both for deposits and loans. The existence of price dispersion is not necessarily indicative of a lack of integration, nor is banking integration going to result in complete elimination of price differences across products and institutions.

4. A more detailed analysis of these questions can be seen in Banco de España Working Papers 0506 and 0530 by Martín-Oliver, Salas and Saurina. 5. An alternative to price indicators is to be found in Pérez, Salas and Saurina (2005), *Moneda y Crédito*, 220, pp.105-144.

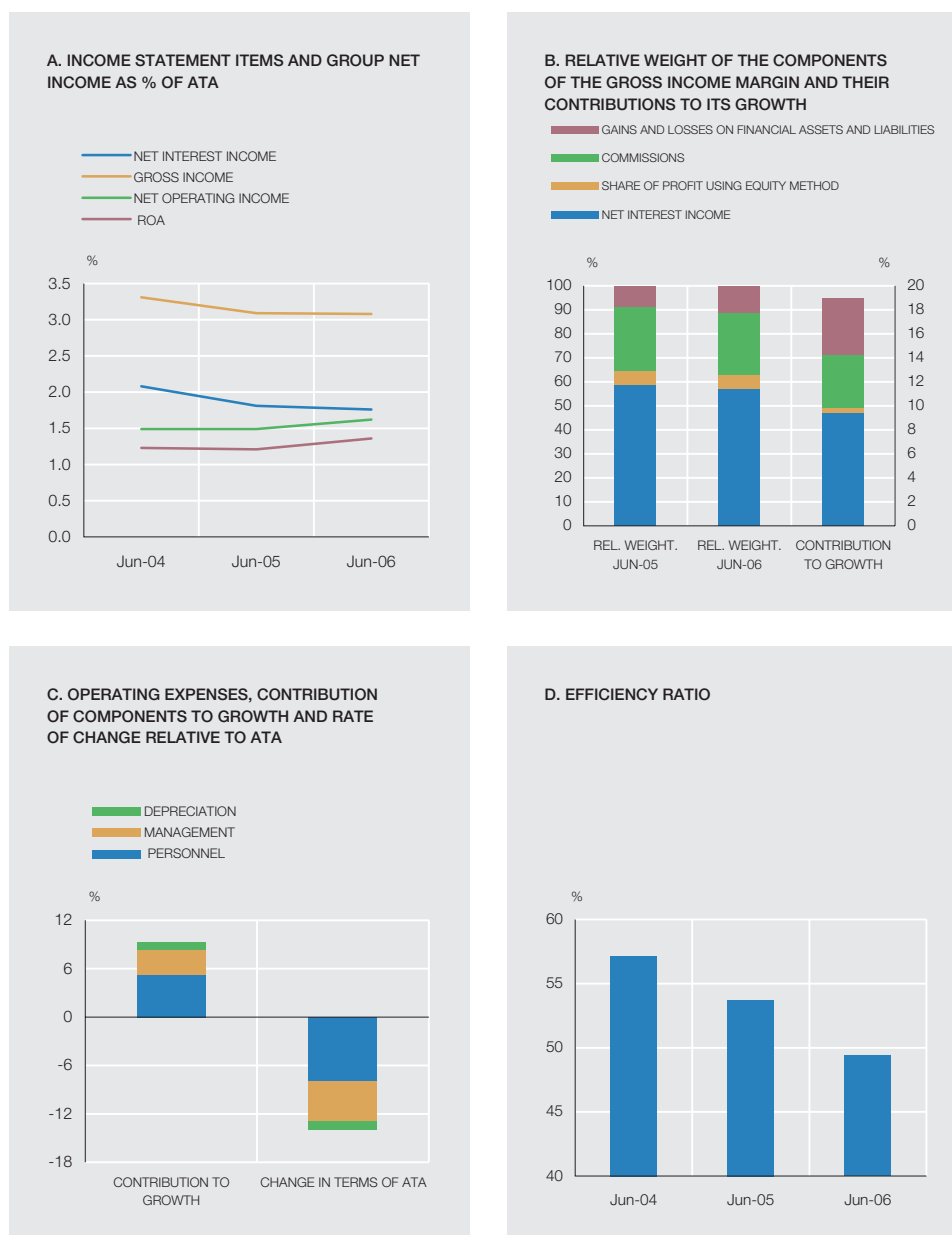
*Asset impairment losses* (similar to the former loan-loss and country-risk provisioning) grew strongly to June 2006 (by 51.1%), rising in terms of ATA by 7 bp, to 0.32%. The behaviour of this item is practically entirely attributable to credit write-downs (which accounted for 98% of the total). The latter increased against a background of moderate growth of doubtful assets and strong expansion of credit, which led to increases in the general provisions. Thus, the amount they deducted from net operating income increased by 2.6 pp, to 19.3% (Chart II. 3B).

*Provisioning expense* fell considerably, by 52.7%, a fall of 10 bp in terms of ATA, to 0.07%. This sharp fall stemmed from other provisions, which more than offset the increases in provisioning for contingent risks and commitments and for pension funds and similar obligations. As a result, the amount this heading subtracted from net operating income declined by 7.4 pp from June 2005, to 4.2%.

Thus, the increase in impairment losses was partly offset by the reduction in provisioning expense, so that after having trimmed 28.5% from net operating income in June 2005, these two items absorbed 23.8% of such income in June 2006. Despite the changes mentioned above, since *other income* grew by only 3.3%, falling by 2 bp to 0.13% of ATA, the contribution of the final part of the income statement to the profit or loss for the period was unchanged in June 2006 from the same period of the previous year. However, it should be noted with respect to other income that its small increase was the result of increases in other gains, reflecting the sales of holdings by certain institutions, which offset the strong growth in other losses.

In short, during the first half of 2006, as observed in the previous FSR, strong rates of improvement were recorded in the accounting income obtained by Spanish deposit institutions. Not only was this performance underpinned by the increase in activity, but, along with the gains made on the sale of company holdings and the increase in efficiency, it led to larger increases in net operating income than in ATA.

Deposit institutions



SOURCE: Banco de España.

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

The good profitability of Spanish deposit institutions is not only appreciable at the aggregate level, the analysis of ROE institution by institution reveals a situation of broad improvement, especially among larger institutions (Table II.2). Thus, in June 2005, 42% of institutions had a ROE of more than 10%, as against 47% in June 2006, while 13% of institutions had a ROE of more than 15%, as against 17% in June 2006. In terms of ATA, the improvement in the return on equity is sharper: the relative weight of institutions with an ROE of more than 10% rose from 89% to 94%, while institutions accounting for 71% of ATA had an ROE of more than 15% in June 2005, as against 78% in June 2006.

Meanwhile, the efficiency ratio also improved for the aggregate of Spanish deposit institutions (see Table II.3). However, as in the case of the ROE analysis, the improvement in efficiency is more pronounced for larger institutions. Thus, while in June 2005 44% of Spanish deposit in-

## NET OPERATING INCOME

Deposit institutions

CHART II.3



SOURCE: Banco de España.

stitutions had an efficiency ratio of less than 60%, in June this year the percentage had risen to 50%. In terms of the average total assets they account for, the rise was from 87% to 90%. The improvement is greater when institutions with an efficiency ratio of less than 50% are considered: in terms of the number of institutions the increase was from 16% to 23%, and in terms of the average total assets they account for, from 33% to 39%.

## INTERNATIONAL COMPARISON

In broad terms, 2005 was a favourable period for European banks. The increase in economic activity in certain countries that had been going through a period of low growth and the developments in international capital markets led to a general strengthening of the economic and financial position of European deposit institutions. Previous FSRs have noted, at the aggregate level, a favourable position for Spanish credit institutions relative to the European Union average. The data available for December 2005 confirm the positive profitability and efficiency differentials of Spanish institutions.

## DISTRIBUTION ACCORDING TO ROE

Deposit institutions

TABLE II.2

	JUN-05		JUN-06	
	No. OF INSTITUTIONS	% ATA	No. OF INSTITUTIONS	% ATA
< 0	6	0.33	4	0.26
0 - 5	21	1.05	21	0.65
5 - 10	72	8.94	67	4.94
10 - 15	51	18.90	50	16.31
15 - 20	13	45.48	18	43.44
> 20	9	25.30	12	34.40

SOURCE: Banco de España.

**DISTRIBUTION ACCORDING TO EFFICIENCY RATIO**

TABLE II.3

Deposit institutions

	JUN-05		JUN-06	
	No. OF INSTITUTIONS	% ATA	No. OF INSTITUTIONS	% ATA
< 40	9	3.76	12	9.50
40 - 50	19	29.67	28	29.70
50 - 60	47	54.24	46	50.95
60 - 70	49	7.91	46	6.60
70 - 80	30	2.41	27	2.46
80 - 90	8	1.51	5	0.50
90 - 100	2	0.06	5	0.17
> 100	8	0.43	3	0.13

SOURCE: Banco de España.

However, the introduction of the new International Financial Reporting Standards (IFRS) has recently complicated cross-country comparative analyses of banking systems within Europe. These new accounting rules, introduced in Spain by CBE 4/2004, were applied in 2005 by 17 European Union Member States<sup>7</sup>. Any comparison between this group of countries (hereinafter referred to as IFRS-EU) and the other eight EU Member States should be made with great caution, as the accounting framework differs in important aspects such as the recognition and valuation of financial instruments and the definition of the items that are shown on and off balance sheet<sup>8</sup>. However, the impact of the accounting change in Spain has been relatively moderate<sup>9</sup>, so that comparisons can be made with countries that had still not adopted the IFRS, although any conclusions should be treated with caution.

Spanish credit institutions are in a relatively comfortable position relative to EU institutions in relation to all the variables considered (Chart II.4A). Thus, their net interest margin is 27% higher than the average for the IFRS-EU countries. This differential is basically founded on the predominantly-retail-based business model applied by Spanish institutions and on the strong expansion of lending, already analysed in Chapter I.

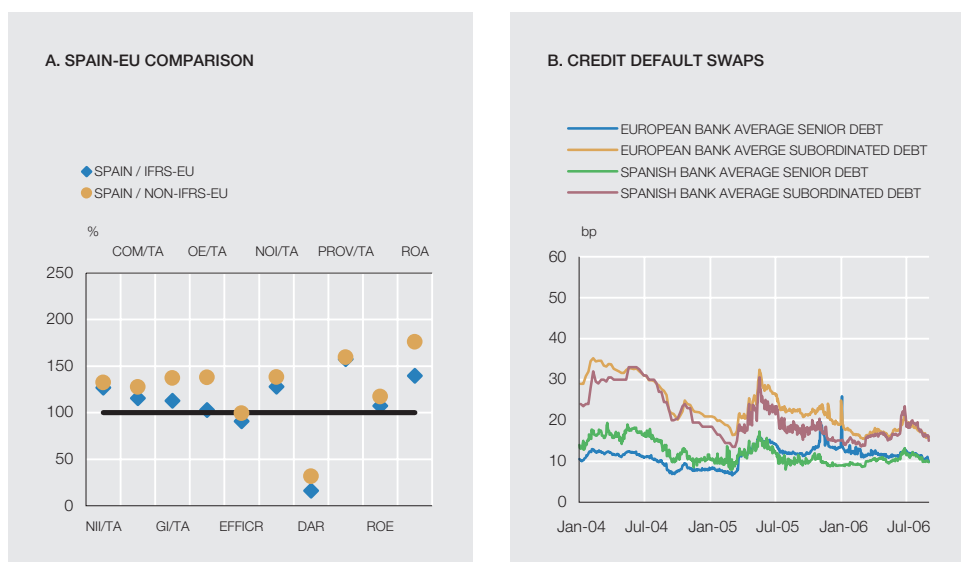
The net commissions of Spanish institutions are 15% higher than those of the IFRS-EU aggregate, which is partly explained by developments in foreign business. As a result of the foregoing, the gross margin of Spanish institutions is 13% higher than the average for the reference aggregate.

With regard to operating expenses, Spanish institutions are at average European levels, while their efficiency ratio is 10% better than the European average. However, the net operating margin of Spanish institutions is 30% higher than the IFRS-EU average.

The comparison in terms of doubtful assets is very favourable to Spanish institutions, even when it is taken into account that the introduction of IFRS has led to greater uniformity in the definition of doubtful assets. At the same time, asset impairment losses were 60% higher than

7. Cyprus, Denmark, Slovakia, Spain, Estonia, Finland, France, Greece, the Netherlands, Italy, Latvia, Lithuania, Malta, Poland, Portugal and the Czech Republic. 8. Box I.1 of the December 2005 FSR contains a concise analysis of the impact of international financial reporting standards on the Spanish accounting model. 9. See the paper by D. Pérez: "Impacto de la Circular Contable 4/2004 sobre el balance y la cuenta de resultados de las entidades de depósito españolas", *Notas de Estabilidad Financiera*, No. 4. May 2006, Banco de España; which estimates that the impact on the balance sheet was 11%, while the impact on profit was a reduction of 3.5%.





SOURCES: ECB, Datastream and Banco de España.

on average in the Community, highlighting the strong expansion of lending by Spanish institutions and, consequently, the allowances associated with an increase in incurred losses still not identified in specific transactions.

The two main indicators of profitability, ROE and ROA, sum up the strong performance of the banking industry, putting Spain 7% and 40%, respectively, above the IFRS-EU average. It should be underlined that this improvement in results was across the board, and not limited at any time to a small number of institutions.

The comparison with the other countries that had not adopted IFRS in 2005 (non-IFRS-EU)<sup>10</sup> (Chart II.4A) shows an even more favourable position for Spanish institutions in terms of most of the headings of the income statement and of the two profitability measures.

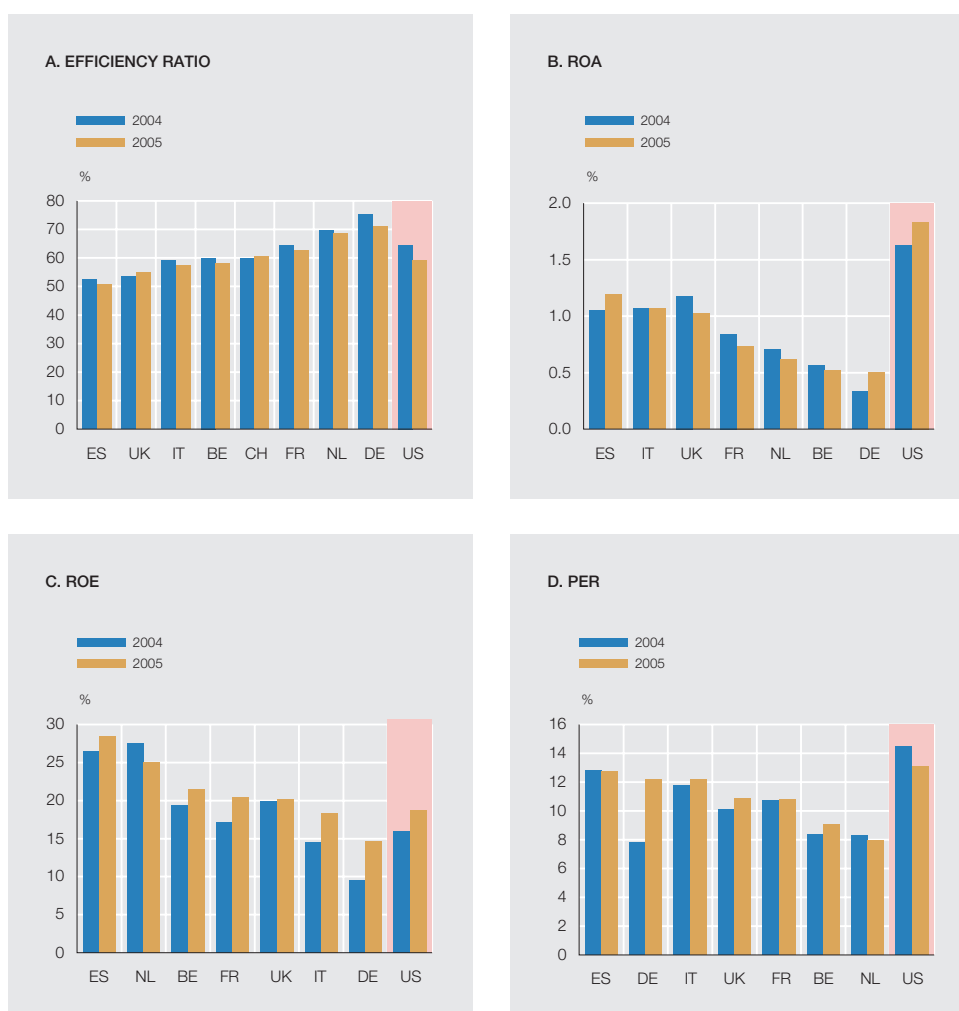
At the individual institution level, *stock market information* gives first-hand knowledge of the value assigned by investors to the economic and financial prospects of listed institutions. The main Spanish banks have been endorsed by an on-going appreciation in their shares over the last two years, which only showed signs of slowing in 2006 Q2, at the time of the bout of international financial market turbulence. The performance of large listed Spanish banks is very similar to that of European banks on aggregate.

In keeping with the share price performance, *implied volatilities*, an indicator of the market's perception of the riskiness of these companies, have been notably stable. The behaviour observed for the main European banks is similar to that of Spanish institutions, which indicates increasing synchrony between the main European financial institutions.

*Credit default swaps* (CDS) on the senior and subordinated debt of institutions, which give an explicit indicator of their credit risk, have continued to display the stability identified in the last FSR, being very similar for large Spanish and European financial groups (Chart II.4B).

10. Germany, Austria, Belgium, Slovenia, Hungary, Luxembourg, United Kingdom and Sweden.

## Sample of large banks

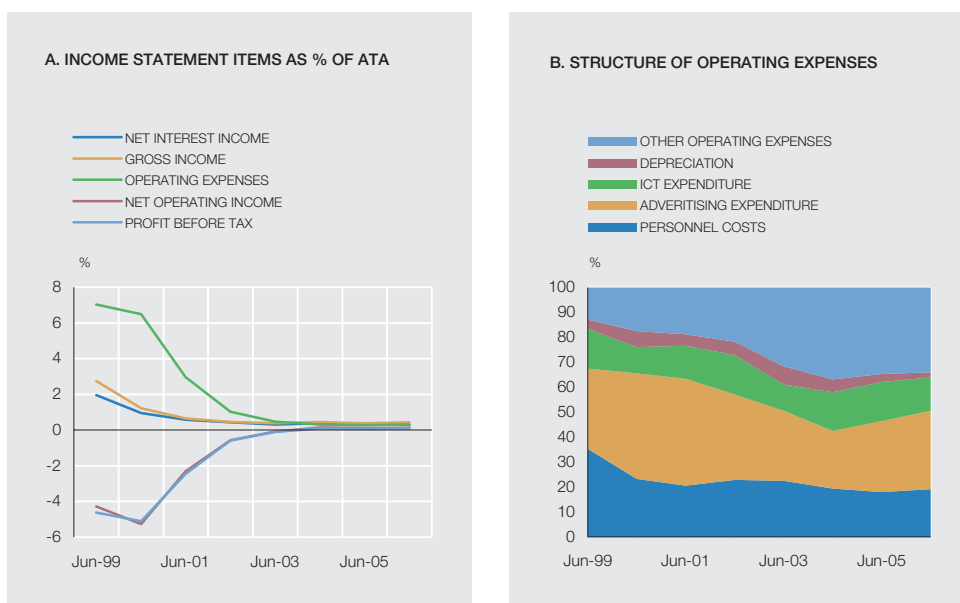


SOURCES: Banks' annual reports and Datastream.

At the same time, the betas for the DJ Stoxx 50 index have risen significantly at the European level and more moderately at the Spanish level. The average beta for Spanish banks is close to one.

The comparison between *large international banks*<sup>11</sup>, based on 2004 and 2005 data, show the efficiency of Spanish institutions, closely followed by the UK banks (see Chart II.5A). With regard to the returns on assets and equity (see Chart II.5B and II.5C), the main Spanish banks also occupy a very prominent position, with an improvement in 2005 relative to 2004. Finally, the large Spanish banking groups again had the highest PER (see Chart II.5D), which shows the higher growth potential attributed by the market to their medium-term results. Despite the clear improvement in the efficiency and profitability of the large European banks compared to the situation a significant number of them were in at the beginning of the decade, a time of very weak growth in their home countries, the differences in terms of profitability vis-à-vis large US banks are still very significant<sup>12</sup>.

<sup>11</sup> The sample of large European banks is made up of two German banks, three French, three Italian, five British, two Belgian, two Dutch and two Spanish. In addition, five US banks were included in the analysis. <sup>12</sup> The only exception is the ROE although, given their high ROA, it may be attributed to the significantly lower leverage of US institutions or, in other words, to the greater weight of equity in their total assets. The prudential rules in this area probably have something to do with this situation.



SOURCE: Banco de España.

ELECTRONIC BANKING

The November 2004 FSR analysed the income statement of institutions specialising in electronic banking. Following an initial period when they were entering the market, these institutions had managed to obtain a profit, although it was small relative to their ATA. This profit was largely based on the lower relative weight of their operating expenses when the volume of their activity increased significantly.

Two years on, the situation of the income statement has not significantly changed: profit before tax remains positive, although modest in terms of average total assets (see Chart II.6A). This level of profit is based on operating expenses that are low in relative terms, a characteristic of the business specialisation, and margins that are also low. The scant net interest margin is not attributable to a low average return on assets (3.9%), but to an average cost of liabilities (3.6%) that is well above that for deposit institutions as a whole (2.3%).

As regards the structure of operating expenses (see Chart II.6B), the relative weight of advertising expenditure increased (to around 30% of total expenses), while personnel costs (20% of the total) and IT costs (15% of the total) were unchanged and depreciation declined.

Electronic banking may be increasing competition in the deposit-taking segment because, in parallel with its development, there has been a sustained increase in the average cost of liabilities for the system as a whole. At the same time, traditional institutions are responding by increasing the segmentation of their customers and distribution channels, and even setting up their own electronic banking divisions. The profitability of such divisions is not known, as the institutions concerned do not report separate results for them.



### III Solvency

In June 2006 the total solvency ratio of Spanish deposit institutions was well above the regulatory minimum requirements. However, the downward trend of the tier 1 ratio became more marked. The differing course of these two ratios was partly due to the introduction of Banco de España Circular (CBE) 2/2006 on the determination and control of minimum own funds, amending the existing regulations (CBE 5/1993)<sup>1</sup>. Its application has had an asymmetrical effect among the various items composing own funds since, together with other amendments, it extended the list of accounting items eligible to form part of tier 2 capital and, at the same time, it increased deductions.

#### III.1 General situation

As seen in previous FSRs, the *total solvency ratio*, determined pursuant to Spanish regulations on own funds, rose slightly from its June 2005 level (by 5 bp) and then remained very steady at 10.6% of risk weighted assets. This behaviour is similar to that of the solvency ratio calculated under the *Basel rules*<sup>2</sup>, which stood at 12.1% after decreasing by only 10 bp. The declining trend of the *tier 1 ratio* quickened as it decreased by 65 bp to 6.9% in June 2006 (Chart III.1A).

The strong activity of institutions in Spain and abroad led to higher capital requirements as a direct result of the sharp increase in risk weighted assets (20.2%). Similarly, total own funds continued to increase at a brisk (20.7%), although slower, rate (Chart III.1B), which helped keep the total solvency ratio unchanged.

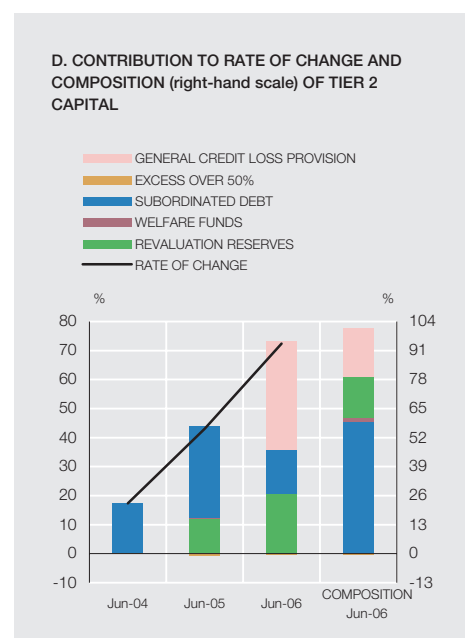
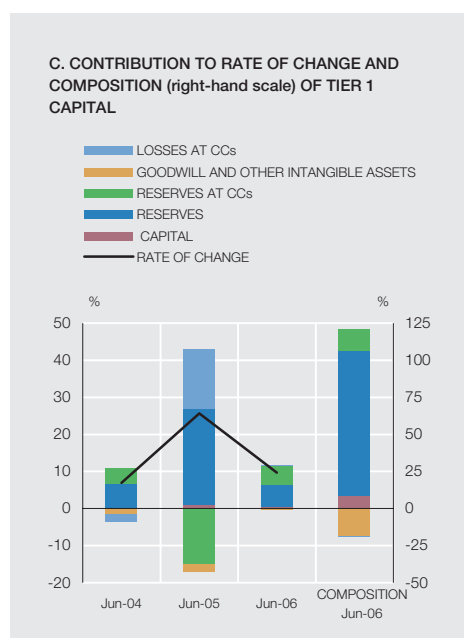
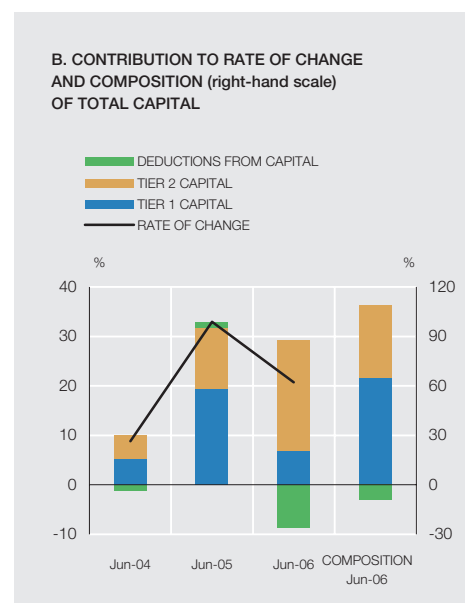
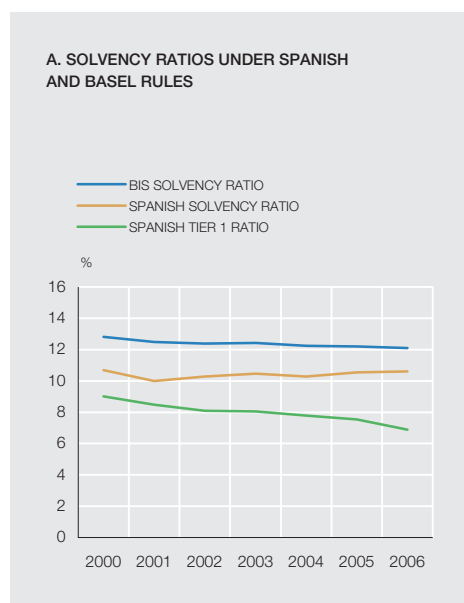
The behaviour of the components of own funds was mixed. Thus, while tier 1 capital decelerated by 16 pp, with an increase of 9.7%, tier 2 capital accelerated considerably, with growth of 72.4% (29.3 pp more than in 2005), and deductions rose fourfold in volume (346%). The developments in the latter two items resulted from the regulatory changes.

The slowdown of *tier 1 capital* followed the impact in 2005 of the entry into force of CBE 4/2004, which tended to reduce both goodwill and losses and reserves in consolidated firms, and the positive effect on reserves of the acquisition of a large foreign institution in 2004. Against a backdrop marked by the scant influence on tier 1 capital of the introduction of CBE 2/2006, reserves slowed by 19.8 pp to rates more in line with their historical level (5.8%), while reserves in consolidated companies grew by 48.3%. For their part, deductions from tier 1 capital continued to make a very small contribution to the overall behaviour (-1.8%).

*Tier 2 capital* was highly buoyant as a result of three factors (Chart III.1D). First, CBE 2/2006 permitted the inclusion as tier 2 capital, up to a limit of 1.25% of risk weighted assets, of the general provision for credit losses incurred but not yet identified in specific transactions<sup>3</sup>, which contributed to a large extent to the total change (37.5 pp), its relative weight in tier 2 capital being 21.8%. Second, asset revaluation reserves continued to grow, especially in savings banks, at very high rates (187%) as a result of inclusion in tier 2 capital of the gains on investments in shares. Finally, the growth of subordinated debt held steady at 17.1%, although its weight in tier 2 capital is now only 59.3% (28 pp less than in 2005).

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1. Box III.1 analyses in more detail the changes made by CBE 2/2006 and their impact on institutions' solvency ratios. 2. Under the Basel rules, unlike under CBE 2/2006, holdings of institutions or banking groups in insurance companies that exceed 20% of the investee's capital are not expressly considered to be deductions. This means that the Spanish requirements, in line with Community regulations, are more demanding than those of Basel I. 3. The other credit loss provisions are specific in that they are recorded to cover risks incurred and identified in specific transactions (doubtful assets).



SOURCE: Banco de España.

Nearly all components of *deductions from tier 2 capital* increased, but the rise was basically due to the fact that holdings in insurance companies now qualify as deductions if they exceed 20% of the investee's capital. This item, which accounted for more than half of the total deductions, contributed 256 pp of the total change in deductions (Chart III.2A).

The solid growth of the Spanish economy and the generally good performance of the other economies in which Spanish banks have a significant presence continue to be conducive to banking activity and, in particular, the expansion of lending to households and firms. This has resulted in growth of *risk-weighted assets*, which has in turn entailed greater capital requirements. Hence own funds requirements again grew strongly, although less so than in the previous period, when they were affected by the aforementioned acquisition of a foreign institution.

Banco de España Circular (CBE) 2/2006 amends the previous CBE 5/1993 in regard to the *definition of own funds*, significantly changing the eligibility and deductibility of certain of their components. In short, the new Circular makes the *general allowance/provision* for customer insolvency risk, i.e. that linked to inherent losses or to losses incurred but not yet individually identified, eligible tier 2 own funds, up to a limit of 1.25% of risk-weighted assets. *Gains* (or the deduction of certain losses) arising from the application of CBE 4/2004 are also considered to be eligible as own funds. Finally, the range of *deductions* from own funds is broadened. Thus, for example, eligible deductions include *holdings in insurance companies* or in reinsurance or similar firms if the holding exceeds 20% of the capital of the investee<sup>1</sup>, as well as the subordinated debt issued by investees or companies acquired by the group.

The impact of CBE 2/2006 can be measured by comparing the composition of own funds for two consecutive dates, in this case June 2005 and June 2006. With regard to core or tier 1 own funds, neither

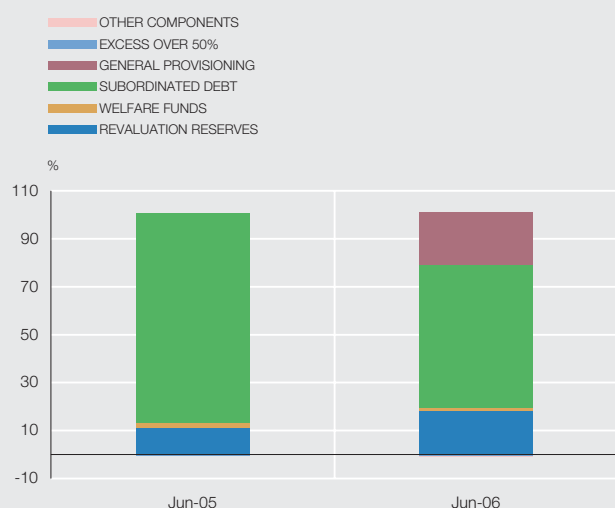
losses on equity instruments and debt securities, nor provisions for net investments in foreign business segments, both introduced as negative components of core own funds, had a significant effect on their composition, since their overall relative weight does not reach 50 bp (1.9% of deductions) for total deposit institutions.

As regards tier 2 own funds (Chart A), the eligibility of the general allowance/provision resulted in a substantial change in their composition, as was to be expected. Despite the limit of 1.25%, its weight amounted to 21.8% of total tier 2 own funds and 27.5% of its positive components. In addition, CBE 2/2006 recognises the eligibility of certain gains on equity instruments and on debt securities arising from CBE 4/2004, which caused the weight of revaluation reserves to increase from 11% to 18.4%.

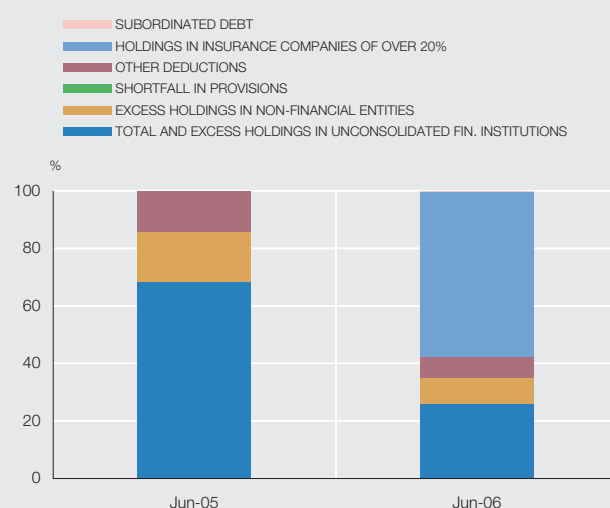
Meanwhile, the composition of deductions changed substantially due to the inclusion of holdings in insurance companies when the institution or group holds more than 20% of their capital (Chart B). This new item amounted to 57.5% of total deductions in June 2006, largely offsetting the increase in own funds produced by the other changes.

1. This deduction is not applied by the BCBS. However, it is used in the EU.

**A. COMPOSITION OF TIER 2 CAPITAL**  
Deposit institutions



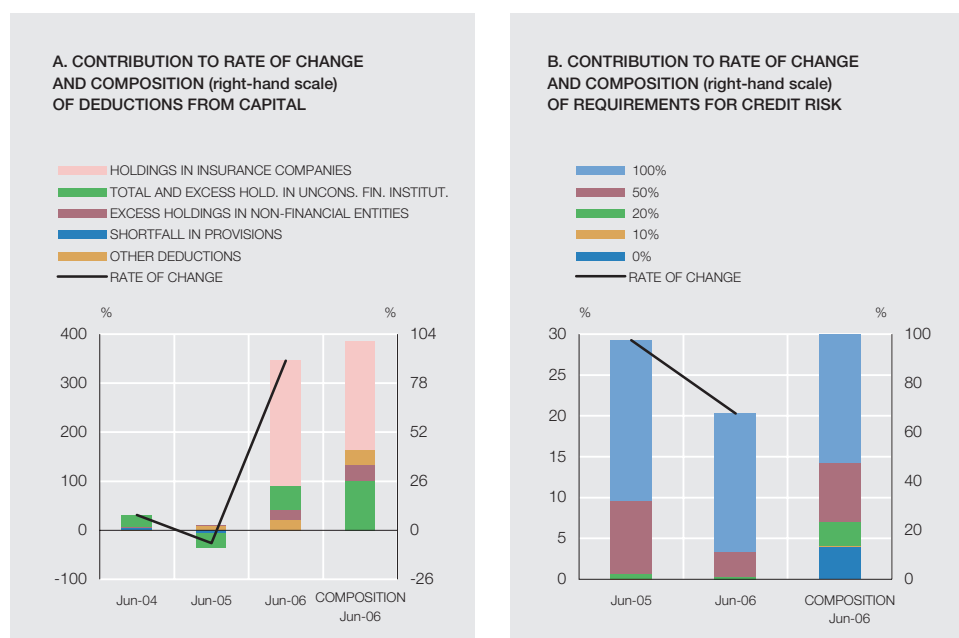
**B. COMPOSITION OF DEDUCTIONS FROM CAPITAL**  
Deposit institutions



SOURCE: Banco de España.

Credit continues to be the main engine of banking activity, as evidenced by its importance within the total requirements (95%). The requirements arising from credit and counterparty risk increased by 20.3% in June 2006, propelled by the rise in assets weighted at 50%, mostly mortgage loans for house purchases (16.3%), and by those weighted at 100% (Chart III.2B), largely made up of financing to firms and consumer credit (21.7%). The risk profile of the portfolio, as measured by the yardstick of its average weighting, increased by 2.4 pp to 66.5%. Requirements arising from the trading book were second in importance (3.6%), but although they were higher in this period (11.7%) their contribution to total requirements is very small.

Deposit institutions



SOURCE: Banco de España.

### III.2 Analysis based on individual institutions

The aggregate behaviour of the solvency ratio differs significantly from that at the level of individual institutions (Chart III.3A). In terms of numbers of institutions, there was a rightward shift in June 2006 in the distribution of the solvency ratio from the lower brackets (Chart III.3B), consistent with an improvement in the ratio of a large number of institutions. Despite this, the 12-15% bracket still accounts for only 11.7% of average total assets. At the same time, the higher relative weight of the 8-10% bracket, together with the lower number of institutions in it, indicates that certain institutions of medium-large size have reduced their solvency ratio, passing from the 10-12% bracket to the 8-10% bracket. These opposing effects (a high number of institutions with an improved ratio and the high weight of those with a slightly worse ratio) resulted in no change at the aggregate level, as noted at the beginning of the chapter.

### INTERNATIONAL COMPARISON

As in Chapter II, the comparison with European banks has been affected by the introduction of International Financial Reporting Standards (IFRS). Consequently, comparisons should be regarded with caution.

In 2005 the total solvency ratio of Spanish institutions stood 39 bp above that of the IFRS-EU aggregate (Chart III.4A). By contrast, the tier 1 solvency ratio was 24 bp below that of this aggregate<sup>4</sup>. Comparison with the non-IFRS-EU countries reveals the opposite situation, since the total solvency ratio of Spanish institutions was 42 bp lower and their tier 1 ratio 18 bp higher in June 2005. Overall, with regard to solvency, Spanish institutions conform to European standards, amply exceeding the minimum requirements set in the Basel I Capital Accord, which is still in force.

Comparison of the listed large international banks paints a favourable picture (Chart III.4B). Among the countries considered, the Spanish banks have high total solvency ratios, and they are in an intermediate position in regard to their tier 1 ratio.

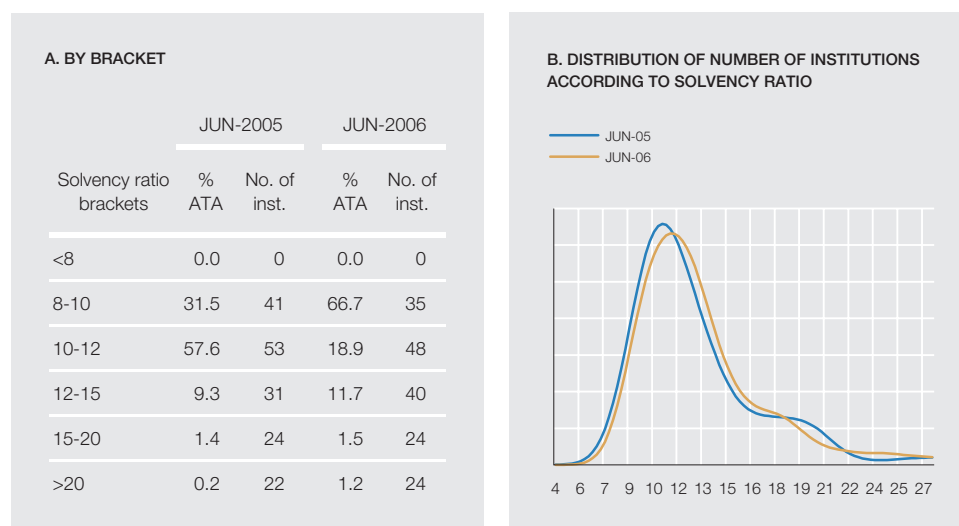
4. Note that the 2000 data have been restated in accordance with the new accounting principles and that there may therefore be certain differences with respect to the analysis of previous FSRs.



## SOLVENCY RATIO DISTRIBUTION

Deposit institutions

CHART III.3



SOURCE: Banco de España.

Finally, the pay-out ratio, which indicates the percentage of earnings distributed by a company to its shareholders as dividends, stood at 45% in the case of Spanish institutions (Chart III.4C). In 2005, this percentage was exceeded by British, Italian, Belgian and, outside Europe, US institutions. The decrease in the pay-out ratio of Spanish institutions with respect to 2004 took place against a background of higher profits than in previous years.

### STRESS TESTS AND PRUDENTIAL RULES

The IMF has recently conducted an assessment of the Spanish financial system (*Financial Sector Assessment Program*) which showed its resilience to credit, market, on-balance-sheet interest rate and liquidity risk. These conclusions were drawn from the results of stress tests performed at the aggregate level for all deposit institutions and analyses conducted individually by a representative group of financial firms (deposit institutions and insurance companies). It was therefore a highly comprehensive study of the ability of the Spanish financial system to absorb macroeconomic shocks that give rise to unfavourable situations for institutions.

Stress tests enable indicators of the banking system's fragility to be constructed. It is of particular interest to analyse the impact of a macroeconomic shock not only on the system on average but also on the weakest institutions. One way of carrying out this analysis is by simulating an unfavourable scenario (e.g. economic activity comes to a standstill and interest rates rise by 200 bp) which causes a certain volume of expected losses that ultimately have an impact on profits and own funds. Next, institutions are ordered by the relative fall in their profit and own funds and the 10% of institutions in the worst situation are chosen. The relative weight in terms of total assets of this 10% of institutions gives an approximate measure of the extent of the shock and, therefore, of the potential impact on the stability of the banking system.

Using actual 2004 and 2005 information to evaluate the situation in 2005 and 2006, respectively, and assuming a highly improbable and unfavourable scenario such as an economic standstill and interest rates 200 bp higher, the expected losses for an institution in the 90th percentile of the distribution would amount to 10% of its profit before tax. The percentage fall in own funds would be less than 1%. If there were no general allowances for bad debts, the conclusions would be significantly more unfavourable, since the expected losses of an institution in the 90th percentile would be twice as high as its profit before tax (going from 10% with



SOURCES: ECB, banks' annual reports and Banco de España.

a general provision to 200% without it) and the impact on own funds would rise to 15% (against 1% when a general provision is assumed). Even under the scenario with no general provision, the relative weight of the institutions in the worst decile of the distribution is 2.5% in 2005 and around 1.5% in 2006, which indicates that the institutions most affected by the shock are very small and, in addition, their relative weight decreases in the last year<sup>5</sup>. This corroborates the significant contribution of the prudential provisioning mechanism to the stability of the Spanish banking system and to its resilience to potential shocks.

5. The study was carried out at consolidated group level, it includes only commercial banks and savings banks, and institutions with a highly atypical behaviour were excluded. Nonetheless, the sample of institutions considered (somewhat more than 60) represents more than 95% of the consolidated total assets of deposit institutions.

## ANNEX: EXPLANATORY NOTES AND GLOSSARY



## 1 Explanatory notes

Much of the financial stability analysis conducted in this Report, particularly the study of the balance sheet, risks and profitability of deposit institutions, is based on the information provided by the financial statements required under the accounting circulars of the Banco de España (CBE), namely CBE 4/1991 to June 2005 and CBE 4/2004 thereafter. The analysis of solvency draws mainly on the information from the statements under CBE 5/1993, on minimum own funds. This Circular has been adapted to CBE 4/2004 by CBE 3/2005, which came into force in June 2005.

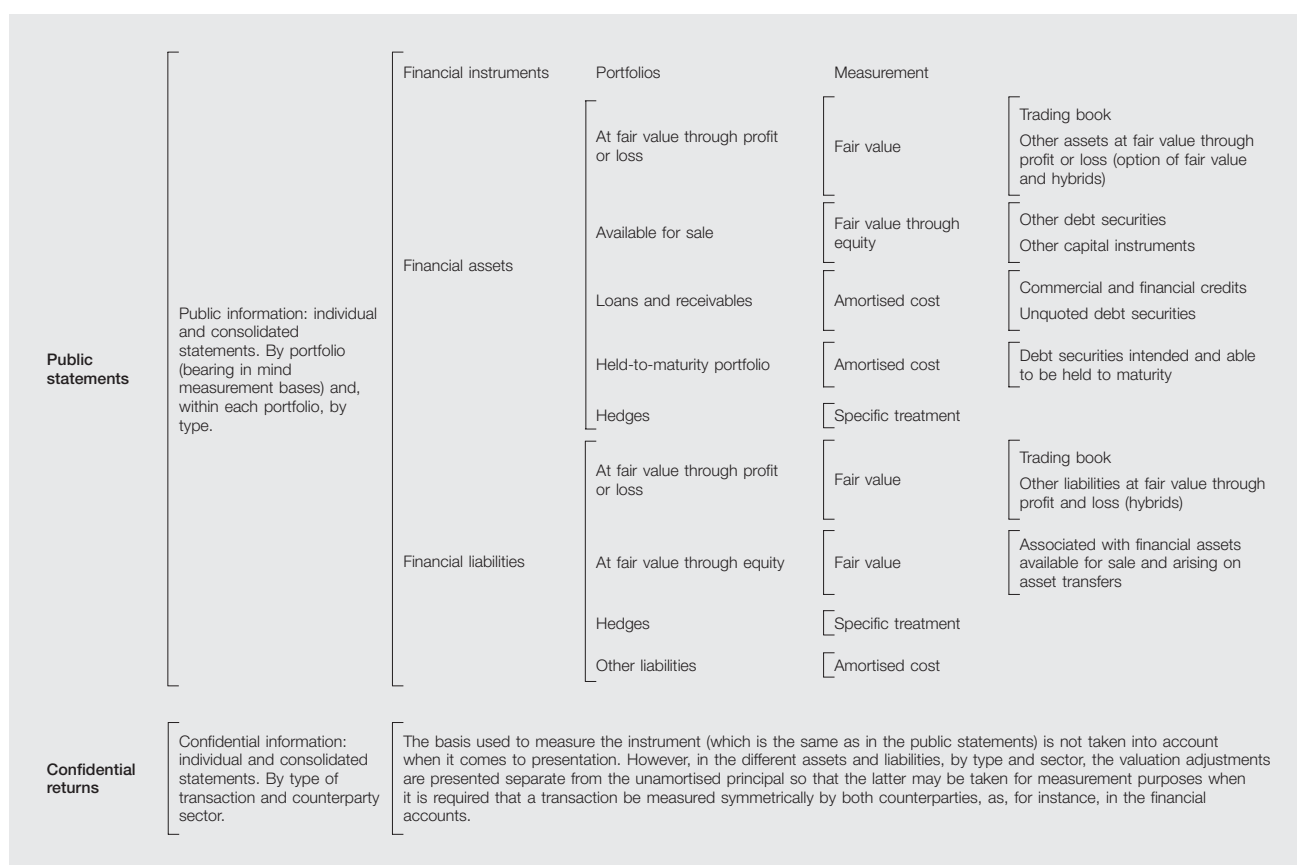
The accounting Circular provides information from various perspectives. Thus the information according to the subject represented may be individual or consolidated, combining with that provided according to the end-user targeted, i.e. public information, for general dissemination, and confidential information for the supervisor. Moreover, the confidential information on total business is broken down into business in Spain and business abroad.

Public information has a general aim and, therefore, is directed at users in general. Under CBE 4/1991, these users were chiefly considered to be the management of the bank itself, the employees, the authorities and market agents, while CBE 4/2004 considers investors to be the main user since, if investors' information requirements are met, focusing on risk and profitability, many of the information requirements of the other users will be covered. The financial information provided by the confidential statements has supervisory and/or statistical ends.

Under CBE 4/1991 both the public and confidential consolidated returns referred to the same consolidable groups of credit institutions, i.e. owing to their supervisory end, they referred to the same consolidation groups and with the same scope as those pertaining to the minimum own funds circular. Accordingly, the scope of application for the analysis of balance sheets, risks and profitability of the accounting circular was the same as the analysis of risks and solvency of the minimum own funds circular.

Regulation (EC) 1606/2002 and the Commercial Code state that companies whose securities have been admitted to trading on a regulated market of any European Union Member State must, from 2005, file their public consolidated accounts in accordance with International Accounting Standards (IAS)/International Financial Reporting Standards (IFRS).

The aim of CBE 4/2004, which adapts the financial reporting standards of the EU, is that there should not be different accounting standards for different credit institutions competing against one another and subject to the same banking regulations and supervisory regime. To do this, and so that these institutions' accounts should be homogenous, comparable and aggregatable, the Circular has extended the application of these standards to the public statements (balance sheet, income statement, statement of changes in equity and cash flow statement) of all credit institutions, with quoted securities or not, and to both their consolidated and individual accounts. However, individual and consolidated confidential returns, which are not intended to provide general information but are for supervisory and statistical ends, do not present financial instruments in the same way and do not have the same scope of consolidation as public statements, although the bases for measuring and recording transactions and the definition of the financial instruments are the same in both statements and are, therefore, consistent with one another.



The new Circular, for both individual and consolidated public statements, presents financial instruments in accordance with IAS, i.e. by portfolio, bearing in mind the principle by which they are valued, and, hereunder, by type. The December 2005 FSR included a table, reproduced here as Table A.1, briefly explaining the content of these portfolios. In the case of confidential returns, it presents financial instruments by counterparty sector and type of transaction. In the confidential returns, unlike the public statements and for statistical reasons, asset and liability valuation adjustments are separate from unamortised principal, which allows for an analysis of the changes over time in the various captions not affected by changes in the value of financial instruments or in the portfolio in which they are recorded (Figure 1). CBE 4/1991 measured financial instruments at unamortised principal, and in a symmetrical fashion for assets and liabilities. Since the confidential returns of CBE 4/2004 enable this measurement to be segregated, the statements of both circulars can be linked in respect of a very significant portion, in quantitative terms, of the balance sheet (mainly loans and deposits).

Nonetheless, the measurement bases are common to the public statements and confidential returns alike, although in the latter, as said, valuation adjustments are presented separately from unamortised principal so that they may also be measured in accordance with this principle. In sum, and without taking into account each and every circumstance, financial instruments may be said to be measured: 1) at fair value, in the case of financial assets and liabilities in the trading book or financial derivatives, and available-for-sale financial assets; 2) at amortised cost, in the case of loans and receivables and held-to-maturity investments, and other financial liabilities (Figure 1).

*Financial assets* are grouped in five main portfolios: financial assets held for trading, other financial assets at fair value through profit or loss, available-for-sale financial assets, loans and receivables, and held-to-maturity investments.

*Loans and receivables* basically include untraded financial assets that represent debts for their issuer or obligor. These assets are carried at amortised cost.

*Available-for-sale financial assets* include the debt securities not earmarked to be held to maturity nor held for trading nor included in the institution's portfolio of other financial assets at fair value through profit or loss, and the equity instruments (shares) of firms other than subsidiaries, associates and jointly-controlled entities not carried at fair value through profit or loss. Available-for-sale assets are carried at fair value and changes in their value are recorded in equity except when they are realised, whereupon these changes are reflected in the income statement. Nevertheless, equity instruments for which there is no reliable fair value are carried at cost.

*Financial assets held for trading* include the financial assets that institutions intend to realise in the short-term, and trading derivatives. These assets are carried at fair value and changes in their value are reflected in the income statement. Unlike under CBE 4/1991, trading derivatives are considered to be financial instruments recorded in the balance sheet on the assets side or on the liabilities side depending on whether their fair value entails, respectively, a contractual right or obligation to exchange financial instruments with a third party under conditions that are potentially favourable or unfavourable at the balance sheet date.

*Held-to-maturity investments* are carried at amortised cost and include the fixed-term debt securities that the institution has the intention and the financial ability to hold to maturity. Under the new circular, if more than an insignificant part of the held-to-maturity investments portfolio is sold or reclassified, no financial asset may be classified as held-to-maturity or held in this portfolio for a period of two years.

*Other financial assets at fair value through profit or loss* include, for example, hybrid instruments not held for trading that must be measured entirely at fair value, financial assets managed jointly with liabilities under insurance contracts and financial derivatives held for the purpose of reducing exposure to changes in fair value.

The inclusion of *hedging derivatives* and of *macro-hedges* (portfolio hedges) on the balance sheet is a change introduced in the new circular. The latter instruments provide a means, in a given portfolio, of hedging the interest rate risk on an amount of financial assets that form part of the whole but are not identified with specific instruments.

The new public balance sheet explicitly distinguishes between *liabilities and equity*. On the *liabilities* side, the new circular distinguishes four broad categories in which financial liabilities are classified on the basis of how they are managed and measured: financial liabilities held for trading, other financial liabilities at fair value through profit or loss, financial liabilities at fair value through equity and financial liabilities at amortised cost.

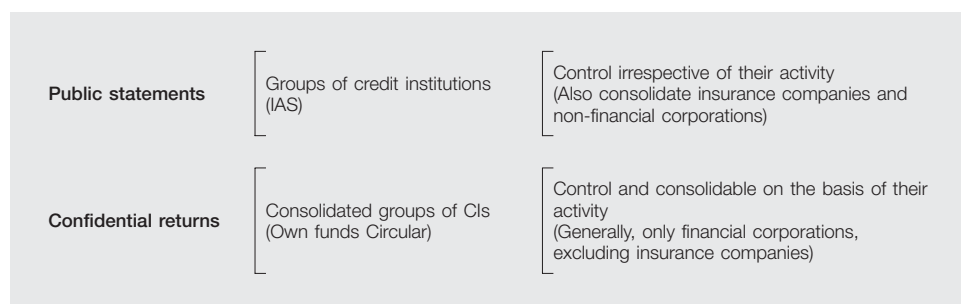
*Financial liabilities at amortised cost* is the only portfolio in which liabilities are not carried at fair value. This portfolio includes deposits from customers (other creditors), debt certificates including bonds and deposits from credit institutions.

*Financial liabilities held for trading* include trading derivatives, other trade certificates including bonds and short positions.

*Other financial liabilities at fair value through profit or loss* include hybrid financial liabilities not held for trading that have to be measured entirely at fair value.

*Financial liabilities at fair value through equity* includes financial liabilities associated with available-for-sale financial assets arising as a result of the transfer of assets over which the institution retains control and has not substantially transferred or retained the related risks and rewards. These assets are measured at fair value through equity.

Finally, *equity* includes own funds, composed basically of reserves and share premium, and valuation adjustments, among which are adjustments to available-for-sale financial assets (unrealised changes in the fair value of financial assets included in this portfolio) and exchange adjustments, where the exchange differences occurring in equity are recorded.



The scope of consolidation also differs between public statements and confidential returns. Thus, in accordance with IAS, consolidated public statements apply to groups of credit institutions in which all the institutions belonging to the group consolidate their accounts, irrespective of their activity (i.e. insurance companies and non-financial corporations also consolidate), while confidential consolidated returns apply to consolidable groups of credit institutions, i.e. those companies consolidable on the basis of their activity, generally all financial corporations except insurance companies. Accordingly, the consolidation groups of the confidential returns of CBE 4/2004 coincide with those of CBE 4/1991, which allows them to be linked, and also with the consolidation followed by the own funds circular. This consolidation is more useful for supervisory purposes, and also gives consistency to the scope of application of both standards (Figure 2).

Application of the IAS and CBE 4/2004 has entailed a forceful break from CBE 4/1991 in terms both of measurement, presentation and scope of consolidation, and of the level of the series of specific headings analysed. Moreover, further to the new Circular, it is important not only to distinguish between the consolidated and individual statements, but also between the confidential returns – the main basis for the FSR – and the public statements which, as seen, refer to a broader field of action or consolidation to which it is also necessary to adhere. This is because public statements are the basis for the information transmitted to the markets and, therefore, this is useful for completing the analysis of the Spanish banking system's stability. As a result of adherence to these different perspectives, the analysis of financial reporting becomes more complicated since a single variable (a ratio, for instance) may be calculated under different scopes of consolidation and with different measurement bases, meaning that, depending on the information source used as a basis, this variable may take different values and, therefore, when it is not from public statements it will be different to the variable published by the institutions themselves.

#### *Consolidated confidential returns of consolidable groups of deposit institutions resident in Spain*

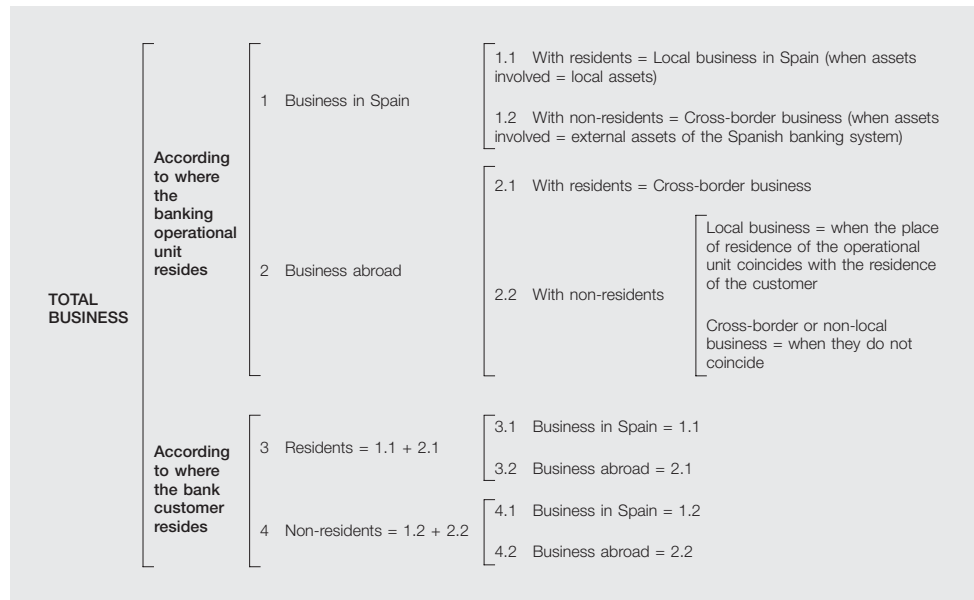
Aggregation of the consolidated balance sheets or income statements of the consolidable groups of deposit institutions resident in Spain. For those institutions that do not have or belong to a consolidable group, or that are branches of foreign institutions, it is their individual confidential returns are considered for aggregation purposes, while in the case of subsidiaries of foreign institutions, it is their sub-consolidated confidential accounts (those of the group that reports to the subsidiary resident in Spain) that are considered.

The consolidated confidential returns (balance sheet or income statement) comprise the worldwide consolidated total business, with intragroup transactions netted out, of the con-



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

FIGURE 3



solidable groups of institutions considered. These consolidable groups are made up of the parent institution in Spain (with its branches abroad) and its consolidable financial subsidiaries, both in Spain and abroad.

The consolidation and aggregation of the consolidated financial statements of the groups of deposit institutions resident in Spain coincides with that of the solvency or own funds returns, with the exception of the branches of institutions resident in EU countries, which do not provide information on own funds.

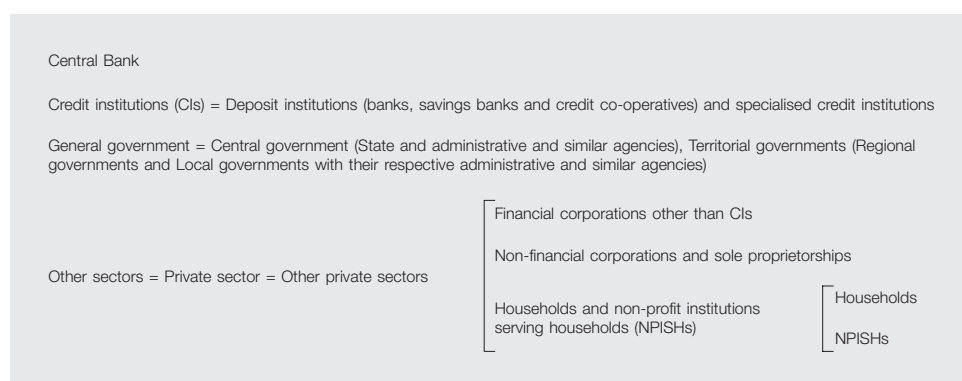
The consolidable financial subsidiaries in the consolidable groups of deposit institutions are those in which control is exercised (control is assumed when voting rights or a share of at least 20% of capital are held) and which belong to one of the following: deposit institutions, specialised credit institutions, securities-dealer 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 and SPVs).

The consolidated accounts of the consolidable groups of deposit institutions residents 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 Figure 3, 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 residents 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.

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

FIGURE 4



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 income statements of these institutions.

The individual statements (balance sheet or income statement) 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 these institutions.

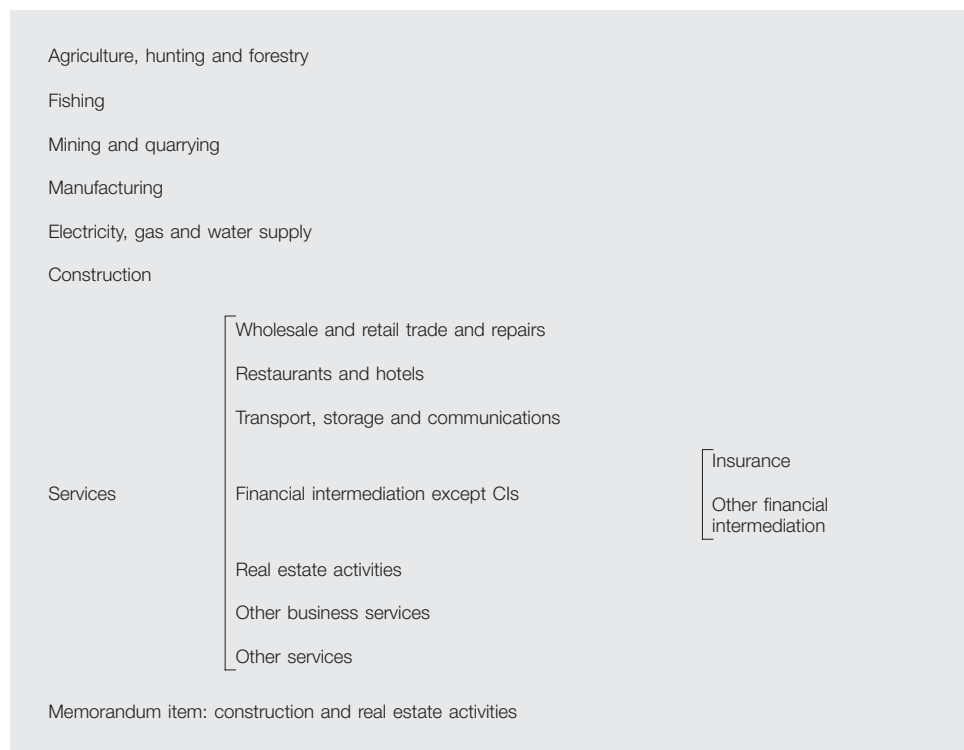
As in the case of consolidated information, the individual statements (total business) can, as observed in Figure 3, be presented using the location in which the operational unit (central headquarters or branch) resides and the location in which the counterparty resides. However, while total business does not include or nets out transactions between units of the institutions residing in different countries, business in Spain and business abroad does not involve 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 (more specifically the Financial Accounts) and the Balance of Payments, but in total business such transactions are consolidated, as they are assets of some institutions and liabilities of others.

Under business in one country, 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 the country, is the basis of the Financial Accounts of said country (Spain) and, therefore, these accounts are linked to the general macroeconomics 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.

*Institutional sectors.* The FSR classifies the institutional sectors featured in Figure 4 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

**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**  
Branches or sectors of activity

FIGURE 5



sectors are sub-divided into the following sub-sectors: Central banks, Credit institutions, General government and other sectors (households, sole proprietorships and corporations other than Credit institutions).

*Productive activities.* The Report refers to activities undertaken by sole proprietorships and by corporations other than Credit institutions, on the basis of the type of industry featured in Figure 5.

The definitions of the balance sheet and income statement items are to be found in Banco de España Circular 4/2004, as are the measurement bases. Nonetheless, the Glossary includes certain items in the light of their 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 financial assets:* Portfolio in the public financial statements which includes debt securities not classified as held-to-maturity investments or as other financial assets at fair value through profit or loss and the equity instruments of entities other than subsidiaries, jointly controlled entities or associates of the institution that have not been included in other financial assets at fair value through profit or loss.

*Average total assets (ATA):* Average of the assets in the period in which such assets give rise to flows of income.

*Bancassurance:* Strategy involving the joint provision of banking and insurance products and services, 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 leveling 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.

*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.

*Cash flow interest rate risk:* Possibility of incurring losses because the future cash flows of a financial instrument may fluctuate because of changes in market interest rates (variable rate instruments).

*Collateralised mortgage bonds:* Securities that can only be issued by credit institutions, 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 accounted for using 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, they are associates, i.e. there is no control (holding of less than 20%). This mechanism consists of valuing the holdings according to the fraction they represent of the equity of the investee.

*Contingent exposures:* Transactions under which an institution guarantees the obligations of a third party (bank guarantees, documentary credit, credit derivatives sold, 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:* The overall risk associated with customers resident in a specific country due to circumstances other than normal commercial risk. It arises from the existence of two different national jurisdictions 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 general inability of the residents of a country to meet their debts owing to a lack of foreign currency or currencies in which they are denominated, for example, owing to the imposition of restrictions on the conversion of the local currency to a strong currency or on its repatriation; and (iii) other risks arising from international financial activity, such as the political risk, which results from legal provisions that give rise to breach of

contract (expropriation, nationalisation, etc.) and that which arises from situations of war, social instability, catastrophic situations or situations of widespread insolvency.

*Country risk impairment loss (credit risk allowance for country risk):* Impairment loss in the period, charged to the income statement, on debt instruments not measured at fair value through profit or loss and on contingent exposures due to country risk, i.e. the risk associated with customers resident in a specific country due to circumstances other than normal commercial risk.

*Cover ratio:* The allowances for bad debts as a percentage of doubtful assets.

*Covered bonds (cédulas hipotecarias):* Debt securities that can only be issued, subject to certain restrictions, by credit institutions, and which are secured by all their mortgage loans, except 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 derivative).

*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 normal activity is to receive repayable funds from the public, other than credit institutions, in the form of deposits or close substitutes for deposits and use them to grant credits, for their own account, and those firms, other than the foregoing, who issue means of payment in the form of electronic money. Deposit institutions, specialised deposit institutions (SCIs) and the ICO are credit institutions. However, SCIs cannot raise deposits from the public, although they can raise close substitutes for deposits by, for example, issuing securities with a maturity of more than one month.

*Credit portfolio:* This is not a portfolio in which financial instruments are classified in the financial statements or under IAS; rather, it is the counterpart of the debt instruments held by the credit institution, i.e. the sum of the outstanding loans granted and the debt securities (fixed-income portfolio). The FSR uses this term as a synonym for financing extended and also debt instruments. 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 financial losses in the event of a debtor defaulting, in form and/or time, on its obligations as established in the agreement of the financial instrument. It may be presented as insolvency risk or country risk.

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

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

*Debt:* The outstanding balance, at a specific time, of loans and deposits received and debt securities issued.

*Debt burden arising from interest:* Accrued interest as a percentage of gross disposable income in the period considered.

*Debt burden:* The sum of accrued interest and, if applicable, the principal of the debt repaid as a percentage of gross disposable income in the period considered.

*Debt instruments:* See debt.

*Debt ratio:* The debt of a sector as a percentage of its total assets (financial and real).

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

*Deposit institutions:* Subgroup of credit institutions 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:* Debit balance sheet balances that are considered unlikely to be fully or partially repaid on the contractually agreed terms, either due to customer arrears or for other reasons (if the institution has reasonable doubts regarding their recovery).

*Doubtful assets ratio:* Doubtful assets as a percentage of financing extended.

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

*Efficiency ratio:* Operating expenses as a percentage of 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 income statement items owing to depreciation (appreciation) with respect to the euro (presentation currency) of the currencies of the countries in which such items are located or generated (functional currency), 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.

*Fair value interest rate risk:* Possibility of incurring losses on account of changes in market interest rates (fixed rate instruments).

*Financial assets and liabilities:* Cash, loans, debt securities, equities, derivatives, insurance contracts linked to pensions, accrual accounts and other financial assets / liabilities. However, references in the FSR to financial assets generally refer to earning financial assets.



*Financial assets / liabilities held for trading:* Portfolio in the public financial statements that can be on either the assets side or the liabilities side. Those on the assets side comprise financial assets that are originated or acquired with the purpose of selling them in the near term, that are part of a portfolio of identified financial instruments managed together for short-term profit taking, or that are derivatives not designated as hedging instruments. Those on the liabilities side comprise financial liabilities that have been issued with an intention to repurchase them in the near term, that are short positions, that form part of a portfolio of identified financial instruments managed together for short-term profit taking, or that are derivatives not designated as hedging instruments. Financial assets / liabilities held for trading form part of the portfolio of financial assets or liabilities at fair value through profit or loss.

*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

*Gains or losses on financial instruments:* Includes: 1) the valuation adjustments of financial instruments recorded in the income statement, except the interest accrued as a result of application of the effective interest rate method and allowances, and 2) the gains or losses obtained from the sale and purchase of financial instruments except those relating to investments in group entities, jointly controlled entities and associates, and to securities classified as held-to-maturity investments. The gains or losses on financial instruments are allocated to the portfolio containing the financial instruments on which such gains or losses arise, i.e.: 1) to held for trading and other instruments at fair value through profit or loss due to changes in fair value; 2) to available-for-sale financial assets and loans and receivables due to sale and purchase and 3) to other, including hedging derivatives.

*General impairment losses (allowances for insolvency risk attributable to the customer):* Impairment loss in the period considered, charged to the income statement and calculated by applying to the credit exposures (debt instruments not measured at fair value through profit or loss and contingent exposures, classified as standard risk) certain parameters based on the outstanding balance and the changes during the period in the various standard risk classes and in the specific impairment losses.

*Goodwill:* The amount of the payment made, as a consequence of a business combination, in anticipation of future economic benefits from intangible assets that cannot be individually identified and separately recognised.

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

*Gross income:* Result of adding to net interest income the share of profit or loss of entities accounted for using the equity method, net commissions, gains or losses on financial instruments, and exchange differences.

*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 credit institutions.

*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 investments:* Portfolio in the public financial statements that includes debt securities with fixed maturity and fixed or determinable cash flows for which the institution has, from inception and at any subsequent date, both the positive intention and the demonstrated financial ability to hold to maturity.

*Herstatt risk:* Principal risk arising upon settlement of foreign exchange transactions when they are not executed on a payment-versus-payment basis. Named after the German bank whose bankruptcy in 1974 highlighted the importance of this risk.

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

*Impairment losses:* Flow during the period, charged to the income statement, 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 allowances), or to provide for losses that have already been incurred but have yet to be allocated to specific transactions (general allowances).

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

*Yield curve:* At a given moment, it shows the level of effective interest 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 Basel Committee on Banking Supervision, 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:* Includes asset and liability liquidity risk, although in the FSR asset liquidity risk is referred to, i.e. agents' inability to dispose of their financial assets rapidly without significantly affecting market prices.

*Loans and receivables:* Portfolio in the public financial statements that includes financial assets that are not quoted in an active market, that do not have to be measured at fair value and that have fixed or determinable cash flows in which the holder will recover all of its initial investment, other than losses because of credit impairment. In the FSR this term is used as a synonym of credit or lending, although certain credit or lending in the public financial statements may be included in financial assets held for trading or in non-current assets held for sale.

*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 holding financial instruments whose value may be affected by changes in market conditions. Three types of risk are included: currency risk, fair value interest rate risk and price risk, as a consequence of adverse movements in interest rates, in exchange rates and in the market prices of assets. Sometimes fair value interest rate risk, currency 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 specially secured by the mortgage loans assigned to them in their issue deed, which can only be issued, subject to certain restrictions, by credit institutions.

*Net debit/credit balance:* Difference between the financing extended (asset) and received (liability). For credit institutions, 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 (sum of net interest and the return on equity instruments).

*Net operating income:* Gross income plus other operating gains or losses less operating expenses.

*Net wealth:* See net worth

*Net worth:* Assets less liabilities. Also called equity.

*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 their holders rank for payment 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 or endowment fund, share premium, accumulated reserves, retained earnings, reserves of entities accounted for using the equity method, other equity instruments, non-voting equity units and associated funds of savings banks, profit or loss attributed to the group, valuation adjustments, less dividends and remuneration and treasury shares. The average level, obtained in a similar way to ATA, is used as the denominator in the calculation of ROE. A restricted definition, excluding valuation adjustments, is sometimes used in the FSR, with the appropriate indication in each instance.

*Pay-out ratio:* Dividend as a percentage of profit. It indicates the proportion of earnings that a firm distributes to its shareholders in the form of dividends. In the FSR this concept is extended to include, in the case of savings banks, a numerator consisting of the annual transfer to the welfare fund and, in the case of consolidated groups, a denominator consisting of the net profit or loss attributed to the group.

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

*Permanent holdings portfolio:* Holdings in subsidiaries, jointly controlled entities and associates 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, either on account of factors specific to the instrument itself or factors affecting all instruments traded on the market.

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

*Real assets:* Non-financial assets, which include tangible assets and intangible 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.

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

*Return on assets (ROA):* Net income (after taxes) attributed to the group as a percentage of average total assets.

*Return on equity (ROE):* Net income (after taxes) attributed to the group as a percentage of 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 by multiplying the parameter  $\alpha$  (alfa) of the method for estimating the general allowance or provision assigned to each of the six categories of risk by the exposure contained therein. The six categories are: *Negligible risk*, which includes, among others, exposures to EU general governments or exposures guaranteed by the latter, and interbank financing extended by the institution; *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 (financial assets abroad):* see risk exposure.

*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 or liability liquidity risk:* Part of liquidity risk, although in the FSR this term refers to the possibility of losses arising from the difficulty the institution has finding funds to fulfil its commitments in relation to financial instruments, i.e. 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 of a company, ranks for repayment before other debt.

*Solvency coefficient:* Regulatory capital as a percentage of 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.

*Spanish deposit institutions:* Savings banks, co-operatives and those commercial banks that are controlled by Spaniards and have their head office or parent company in Spain.

*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 by, for example, issuing securities with a maturity of more than one month or borrowing on the interbank market.

*Specific impairment losses (specific allowances for insolvency risk attributable to the customer):* Impairment loss in the period considered, charged to income statement, arising from customer insolvency risk. The exposures that should be provisioned, with the application of specific minimum percentages, with certain exceptions are: assets classified as doubtful (due to customer arrears or for reasons other than customer arrears), substandard assets, doubtful contingent exposures and commitments (except for guarantees and other indemnities given) classified as doubtful for reasons other than customer arrears, and guarantees and other indemnities given classified as doubtful both due to customer arrears and for reasons other than customer arrears.

*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.

*Structural position in foreign currency:* Unhedged investment assets in foreign currency financed in euro (investments in property for own use, significant holdings 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 (historical exchange rate).

*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 controlled 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 share the burden 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.

*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.

*Unit linked:* Life insurance in which the premiums paid are usually invested in mutual funds. Policy-holders assume the risk of the investments made by the insurance entity with their premiums.

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

*Unrealised capital gains (losses):* Equity valuation adjustments resulting from the profits (losses) that have arisen but are not realised in the securities portfolio recorded in available-for-sale financial assets measured at fair value through equity.

*Unsectorised accounts (net):* The equity of entities and other asset and liability items 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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