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ABBREVIATIONS*

€	Euro
AIAF	Asociación de Intermediarios de Activos Financieros (Association of Securities Dealers)
ABCB	Asset-backed commercial paper
ATA	Average total assets
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BLS	Bank Lending Survey
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
CDOs	Collateralised debt obligations
CDS	Credit Default Swap
CEBS	Committee of European Banking Supervisors
CEIOPS	Committee of European Insurance and Occupational Pensions Supervisors
CIs	Credit institutions
CNMV	Comisión Nacional del Mercado de Valores (National Securities Market Commission)
CPSS	Basel Committee on Payment and Settlement Systems
DIs	Deposit institutions
EAD	Exposure at default
ECB	European Central Bank
EMU	Economic and Monetary Union
ESFS	European System of Financial Supervisors
ESRB	European Systemic Risk Board
EU	European Union
FASB	Financial Accounting Standards Board
FROB	Fund for the Orderly Restructuring of Banks
FSA	Financial Services Authority
FSAP	Financial System Assessment Program
FSB	Financial Stability Board
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
IASB	International Accounting Standards Board
ICO	Instituto Oficial de Crédito (Official Credit Institute)
ID	Data obtained from individual financial statements
IFRSs	International Financial Reporting Standards
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
LGD	Loss given default
LTV	Loan-to-value ratio (amount lent divided by the appraised value of the real estate used as collateral)
m	Millions
MiFID	Markets in Financial Instruments Directive
MMFs	Money market funds
NPISHs	Non-profit institutions serving households
OTC	Over the counter
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
SIVs	Structured investment vehicles
SPV	Special-purpose vehicle
TA	Total assets
TARP	Troubled Asset Relief Program

* The latest version of the explanatory notes and of the glossary can be found in the November 2006 edition of the *Financial Stability Report*.

VaR Value at risk
WTO World Trade Organisation

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Introduction

From the publication of the last Financial Stability Report (FSR)¹, the signs of improvement in both the world economy and the international financial markets have persisted, although they have been uneven across countries and market segments. In addition, these signs of improvement have coincided with recurring bouts of uncertainty and tension linked to a heightened perception of the risk associated with securities issued by the public sector. Notable in this connection are the difficulties of the Greek public finances, which in the early months of 2010 generated a contagion effect on investor perceptions of other euro area countries, including Spain.

Compounding the lack of a full recovery in the international financial markets and the persistence of economic difficulties, Spanish deposit institutions have also been subject to risk arising from the adjustment of the real estate sector. Institutions' final losses from property development lending will depend on their ability to manage the risks assumed, on the effectiveness of the collateral taken and on the future performance of this sector.

In this difficult setting, there have been widely varying impacts and responses among Spanish deposit institutions; that said, as indicated in previous FSRs, the downturn in economic activity is what has determined the behaviour of risks on bank balance sheets.

Credit to the resident private sector has persisted in its downward trend, to the point of recording negative year-on-year rates of change. The economic downturn entails less demand for credit by firms and households, while institutions tighten their credit standards in response to deteriorating customer credit quality and increasing bad debts. Further, to the uncertainty surrounding the performance of the Spanish economy that still persisting on the international wholesale funding markets, must be added. A sharp reversal of credit behaviour in the coming months cannot be expected while the sector remains under this pressure.

From a medium-term perspective, the growth rate of credit will tend to be more similar to that for the euro area as a whole and not like in the past, when the growth of this variable in Spain significantly exceeded the euro area average. Also over the medium term, the restructuring of households' and firms' balance sheets following the strong increase in leverage in the years prior to the crisis will continue apace, which will limit credit growth.

Doubtful assets and, consequently, doubtful asset ratios continued to grow, recording high levels at end-2009, particularly in credit granted to the sectors whose performance is most closely linked to the economic cycle. In any event, despite the fact that this trend will persist in the coming months, doubtful assets are growing less sharply than in previous quarters.

As indicated in previous FSRs, in connection with this worse performance of doubtful assets ratios, their dispersion across institutions is notable. That reflects differences in institutions' risk management and selection ability before and after the crisis, taking specific form in the aforementioned heterogeneity of bad debts, even for institutions with similar strategies.

The exposure to the construction and property development sector clearly exemplifies the foregoing. Not only is there a wide dispersion among institutions in respect of the weight of this type of lending in the total loan portfolio and in respect of the doubtful assets ratio of this

¹. The cut-off date for the present FSR was 24 March 2010.

lending, but also, when the degree of relative exposure is tied in with the related bad debts, there is no clear relationship between these two variables. That is to say, in institutions with high relative exposure to the construction and property development sector there is considerable dispersion of doubtful assets ratios, and the same goes for the other end of the spectrum, i.e. among institutions with low relative levels of exposure to construction and property development.

The Spanish banking sector's exposure to construction and property development activities is a significant risk due to the high volume of loans and because the real estate sector is particularly coupled to the cyclical behaviour of the economy. The ultimate impact of this risk on the sector, which will be different for each institution, cannot be directly linked to the amount of exposure; rather, it will depend on the bad debts that materialise at each institution and on the effectiveness of the collateral taken. In any event, a portion of bad debts is covered both by specific provisions for impaired loans, and by the remainder of the general provisions set aside in the years prior to the crisis.

The information available to the Banco de España indicates that the stock of provisions set aside may be in a position to absorb a loss of 35% of institutions' potentially troubled construction and property development loan portfolio without having to record any additional loss in their income statements. Note that this calculation does not consider either institutions' ability to generate recurring income or their own funds, which have increased substantially over the past year.

Another factor of uncertainty stems from the situation on international financial markets, to which Spanish deposit institutions resorted in order to fund a part of the increase in their activity in the years prior to the crisis. Specifically, the signs of improvement have been uneven across market segments and countries, and they have been curtailed at the start of 2010 by the emergence of the problems linked to Greek public debt.

For the sector as a whole, the concentration of debt maturities in the medium and long term mitigates the need to obtain short-term funds, and further contributing to this were the Spanish government's programme of guarantees and use of Eurosystem liquidity facilities. In this respect, Government guarantees seem to have been used less frequently, although this programme remains open until June 2010, while funding from the ECB is more or less commensurate with the capital key and its weight in Spanish deposit institutions' bank balance sheets remains small (2%).

In view of the ongoing difficulties on international financial markets, Spanish deposit institutions stepped up the business of taking retail deposits as early as 2008. In recent months, after posting high rates of change, the growth rate of deposits has slowed and converged with the rates seen for the euro area as a whole.

Although the consolidated profit of Spanish deposit institutions compares favourably with that of other European banks, it has fallen in relation to that posted in 2008. Resilient recurring income (net operating margin) have been more than offset by the impact of increased bad debts, which resulted in the need for higher loan loss provisions.

Downside risks to income remain in place due to stagnating activity; to narrower margins, in light of the exhaustion of the positive effect of the downward revision of the cost of liabilities attributable to lower interest rates; to increased competition for funding; and to the foreseeable persistence of loan loss provisioning requirements.

Although institutions have stepped up their efforts to contain operating costs, in the face of the above-mentioned downside risks the Spanish banking sector and, in particular, weaker institutions must adapt to the new domestic and international setting by streamlining their structure.

Turning to solvency, there has been notable growth in institutions' own funds which has led to significant increases in their solvency ratios and, in particular, in the ratios of risks assumed to higher-quality capital.

Such a significant strengthening of the tier 1 ratio and, in particular, of the more demanding core capital ratio, reflects the efforts by some Spanish deposit institutions to increase their resilience in the current difficult climate. Further and equally important, however, it leaves these institutions well placed to undertake the highly demanding changes which the Basel Committee on Banking Supervision is introducing in its stricter definition of capital and tighter requirements for the capital that financial institutions must hold in future.

In conclusion, the economic situation remains difficult for financial institutions, and for Spanish deposit institutions there is a further risk arising from the adjustment of real estate development activities. Accordingly, and as reiterated in previous FSRs, it is desirable that restructuring be undertaken so as to adjust the sector's capacity. The Fund for the Orderly Restructuring of Banks (FROB) is one mechanism that will contribute to facilitating this adjustment process for those institutions that need it. Although institutions have begun an adjustment process which has led them to strengthen their own funds, increase deposit-taking and contain their operating costs, particularly through branch closures, restructuring is expected to continue in the coming months. In any event, it must not be overlooked that the greater uncertainty facing the banking sector in the medium run is that relating to developments in the real economy. Consequently, redressing the Spanish economy's structural deficiencies that may hold back its recovery in the coming years will also be pivotal to the success of the restructuring process in the banking sector.

1 Macroeconomic risks and financial markets

Improvement on the financial markets despite various - and occasionally severe - bouts of instability.

Since the last Financial Stability Report was published, there have been recurrent episodes of uncertainty and tension, some linked to specific financial institutions and others, particularly severe, linked to a higher perceived risk associated with public sector securities. Notable among the latter were the episodes connected with certain state-owned corporations, as in the case of Dubai, or with weak public finances, as in the case of Greece. However, despite the severity of some of these episodes, in the period as a whole the financial markets improved somewhat, although unevenly across different segments and markets.

The economic recovery has improved the short-term outlook for the financial sector.

Capital market performance was driven by the improved expectations of economic recovery, which was once again uneven across different areas, and by an increased appetite for risk. This was reflected in the progress made in some areas in the withdrawal of the financial sector support measures (see Chapter 3).

Money markets held stable and credit markets improved.

Against this backdrop, money markets remained steady at levels similar to those seen before the collapse of Lehman Brothers (Chart 1.1.A). Private issue markets recovered somewhat, especially in the case of firms with the lowest credit ratings, which, moreover, saw a decline in their risk premia (Chart 1.1.B). This was reflected in the high momentum of corporate debt issuance, particularly in late 2009 and early 2010, as a result of many firms' refinancing needs and the scant availability of bank credit.

Government debt yields differed across the various countries.

On government debt markets, the improved economic outlook and rising net borrowing led to a rebound in long bond yields in the United States. By contrast, in the euro area long bond yields were conditioned by sovereign risk, remaining quite stable in Germany and rising in other economies, especially in Greece. In this setting, the dollar appreciated against the main currencies, trading against the euro at similar levels to those seen in mid-2009.

Gains on stock markets were accompanied by a decline in volatility...

Volatility indices declined somewhat on most financial markets, approaching their early-2007 levels (Chart 1.1.C), while most of the world's stock market indices rose (Chart 1.1.D).

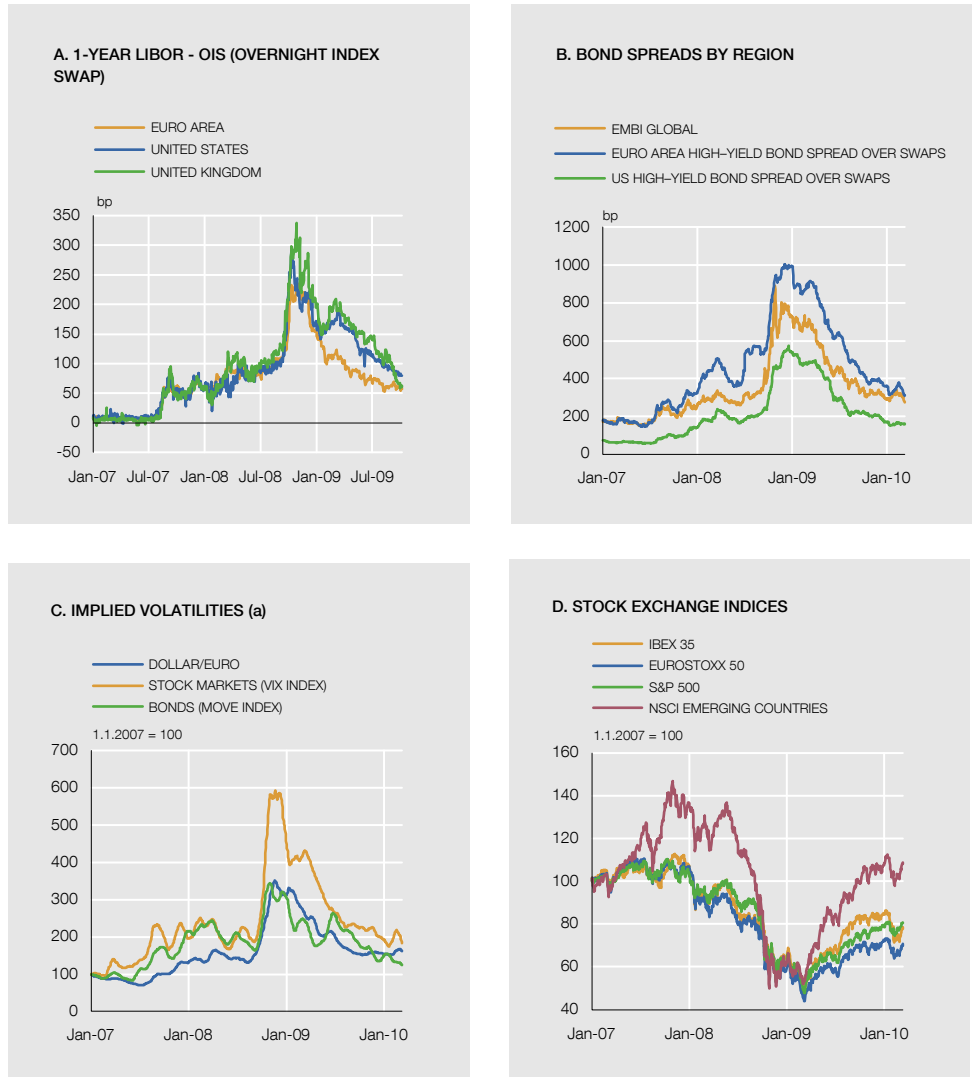
... albeit with marked bouts of instability, such as that in the first two months of 2010 associated with doubts over the sovereign risk of certain countries.

This pattern was temporarily interrupted in the first two months of 2010, mainly due to the doubts arising about certain countries' sovereign risk. This episode of tension had most impact on the European markets, especially as a result of the uncertainty produced by the crisis in Greek public finances. Volatility rebounded, stock prices fell (particularly financials prices) and risk premia both on public and private sector securities rose. Nevertheless, following the European Union's messages of support for Greece in mid-February, there was a certain recovery.

Comparatively, the Spanish markets were harder hit by these developments than the European average; the long-term sovereign debt spread versus Germany widened to more than 100 bp and the IBEX 35 fell by more than 15% from the start of the year. By mid-March, however, when these tensions had diminished somewhat, the long-term sovereign debt spread had narrowed to 70 bp and the decline in the IBEX 35 was a more moderate 8.2%. Stock markets in the emerging countries continued to outperform those of the developed economies, although in this period the differences were smaller than in 2009 H1.

In the second half of 2009 the recovery spread to most

Global economic activity quickened in 2009 H2 and the recovery spread to a growing number of economies. Thus world GDP rose, in quarter-on-quarter terms, by 1% in 2009 Q3 and by



SOURCE: Datastream.

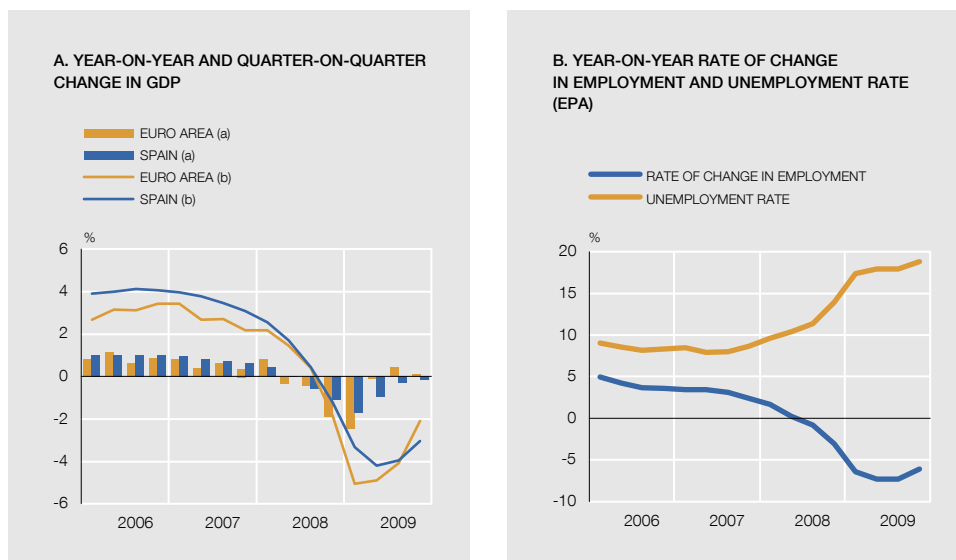
a. Twenty-day moving averages.

countries, but continued to be led by the emerging economies, especially the Asian economies.

1.2% in 2009 Q4, compared with 0.8% in 2009 Q2. However, these growth rates are still slightly short of the average rates recorded in the years before the crisis. The emerging economies, especially the Asian economies (such as China and India) and Brazil, headed this recovery in activity, on the back of strong domestic demand due, in part, to fiscal policy stimuli. At the same time, rising commodity prices (especially industrial metal prices) boosted the recovery in parts of Latin America and in the oil-exporting countries. In turn, the increased momentum in the developed economies relied heavily on the extraordinary measures introduced to support domestic demand – particularly by means of fiscal stimulus packages – and on the reversal of the inventory cycle. However, the strength of the recovery differed somewhat among these economies; the United States posted one of the highest rates of growth, with GDP rising by 1.5% in quarter-on-quarter terms in 2009 Q4.

The recovery in activity continued in 2010 Q1, albeit at a slightly lesser pace.

The higher frequency indicators released in 2010 Q1 suggest that activity will continue to recover, albeit at a more moderate rate in the industrialised economies, as the transitory factors underpinning growth in 2009 H2 progressively lose strength. This was reflected in the closing months of 2009 and in early 2010, in the more or less across-the-board upward



SOURCES: INE, Eurostat and Banco de España.

- a. Quarter-on-quarter rates of change.
b. Year-on-year rates of change.

revision of growth projections, which, however, on average was higher for emerging than industrialised economies, especially for 2011.

Economic growth in the euro area increased modestly in the final stretch of 2009 and the macroeconomic projections for 2010 and 2011 point to a path of slow recovery.

In the euro area economic activity posted a modest rise in 2009 Q4. On Eurostat data, euro area GDP grew 0.1% quarter-on-quarter, 0.3 pp down on the previous quarter. In year-on-year terms, GDP slipped 2.1%, two percentage points less than three months earlier and for the year as a whole it fell 4%, in comparison with 0.5% in 2008 (Chart 1.2.A). In the medium-term, international organisations' most recent projections point to a slow economic recovery, although the uncertainty and risks in this respect remain high. Specifically, the ECB's March projections put the growth rate at between 0.4% and 1.2% in 2010 and at between 0.5% and 2.5% in 2011.

Economic activity in Spain shrank once again in 2009 Q4, albeit at a more moderate pace than in the previous quarters, prompting a further increase in the unemployment rate.

In Spain, at the tail-end of last year the contractionary trajectory of economic activity continued, although the pace of decline eased. Thus, between October and December GDP fell 0.1%, in quarter-on-quarter terms, compared with the 0.3% drop posted three months earlier. The year-on-year rate stood at -3.1%, 0.9 pp above the figure for the previous quarter (Chart 1.2.A). These developments were reflected in the labour market where, according to the EPA (Spanish Labour Force Survey) job destruction continued, although at a slightly slower pace. As a result of this and of movements in the labour force, the unemployment rate rose (it stood at 18.8% at end-2009, Chart 1.2.B). The most recent data indicate that this trend will continue in the opening months of 2010.

Private-sector debt ratios remained high, though the fall in interest rates continued to lighten the interest burden.

In spite of the contraction of private-sector borrowing, the weak income growth seems to have prevented a decline in debt ratios, especially corporate ones. Thus, household and corporate debt ratios remained at high levels. Nevertheless, the drop in the cost of borrowing continued to be reflected, during the closing months of 2009, in further declines in the interest burden of indebted agents. The most recent information on net household wealth, which relates to 2009 Q3, shows that it is relatively stable, following the downward trend of previous months which began in 2008.

Public sector debt ratios and interest burdens increased following the notable increase in liabilities.

General government borrowing has been growing rapidly (at nearly 30%) as a result of the increase in the budget deficit, which stood at 11.2% of GDP for 2009 as a whole, and the rise in financial investment. This development, together with the decline in GDP, was reflected in a rise in the debt/GDP ratio (up from 39.7% at end-2008 to 53.2% at end-2009) and an increase in the debt burden, in spite of low interest rates.

Economic weakness in Spain meant that the proportion of agents subject to high financial pressure continued to rise.

In short, during the last part of 2009 the macro-economic situation continued to deteriorate in Spain, albeit more moderately than in previous months, and this continued to be reflected in rising unemployment. As a result, it is estimated that the level of financial pressure borne by certain sectors continued to increase, especially in those sectors with higher levels of debt and in those hit hardest by the cyclical position of the economy.

2 Deposit institutions and other financial market participants

2.1 Deposit institutions

2.1.1 BANKING RISKS

The persisting contraction in the real economy, and in particular the adjustment in the real estate sector,...

The current juncture continues to be difficult for Spanish deposit institutions. The persisting weakness of the real economy lessens the credit quality of bank balance sheets. Particularly difficult is the situation of the real estate market, especially in regard to the property development sector, where adjustment continues under way. Hence the appropriate management of the risks deriving from institutions' exposures to this sector is of great importance. The ultimate losses of each institution will depend on that management capacity, on the quality of the risks assumed (in a type of lending characterised by consisting of very diverse loans) and on the effectiveness of collateral. And for these reasons the potential losses are not associated simply with the volume of credit granted.

... and the failure of the improvement in the wholesale funding markets to firm in full, shape an economic setting which remains difficult for deposit institutions ...

The situation for the banking sector is also difficult because the positive signs observed in international financial markets have not given rise to a fully consummated improvement in financing conditions on wholesale markets. Thus the securitisation market remains closed, and others such as the interbank or senior debt markets are still not completely open to small and medium-sized institutions. Situations such as that of Greece, and in particular its contagion effect on the way in which financial market participants perceive various economies, including that of Spain, have the effect of widening sovereign debt spreads and make it harder for institutions to access the international funding markets. Moreover, the uncertainty as to when and how central banks and governments will withdraw public measures to support the banking sector is another risk to be considered.

... and which affects different institutions to varying degrees of intensity.

In this scenario, the impacts on and responses by Spanish deposit institutions varied greatly. Although the sector as a whole has tools with which to confront this situation, the restructuring of some institutions would appear to be inevitable.¹ The Fund for the Orderly Restructuring of Banks (FROB) will not only act when tensions affect a specific institution, but will also assist in the adjustment process of the sector by downsizing and strengthening it.

Consolidated assets are growing at a moderate rate that is lower than in previous years,...

The total consolidated **assets** of Spanish deposit institutions (Table 2.1) grew by 3% in December 2009 with respect to the previous year² (8.8% in December 2008 and 14.7% in December 2007). Deposit institutions are not all performing the same in terms of total assets, but their relative importance within the sector as a whole has varied little (Table 2.1).

... due essentially to developments in financing to the private sector.

The moderate growth of consolidated assets of Spanish deposit institutions, noted in previous FSRs, is basically due to the behaviour of financing to the private sector (credit plus fixed income), which in December 2009 remained at the levels of the previous year.³ The behaviour of financing to the private sector is mainly explained by that of credit extension, the downward trend of which is consistent with the situation of the Spanish economy, due both to lower demand and to the more demanding stance of institutions towards their borrowers in the face of rising bad debts, and with the persisting difficulties in the international wholesale funding markets.

Bad debts at the consolidated level continued

The total doubtful assets on consolidated balance sheets grew by 48% in December 2009. This rate is high, but lower than in previous reports (171% in June 2009 and 239% in

¹. Box 2.1 explains the Banco de España's action regarding CajaSur. ². This increase in the consolidated balance sheet is further raised by the change in the scope of consolidation of a large Spanish institution. Excluding this institution from the analysis, the increase in total assets is more moderate (2.1%). ³. Excluding the effect of the changes in the scope of consolidation of a large Spanish institution, the year-on-year rate of change of financing to the private sector is -2.8%.

CONSOLIDATED BALANCE SHEET
Deposit institutions

TABLE 2.1

ASSETS	DEC-09	CHANGE DEC-09/ DEC-08	RELATIVE WEIGHT DEC-08	RELATIVE WEIGHT DEC-09
	(€m)	(%)	(%)	(%)
Cash and balances with central banks	88,115	-14	2.9	2.4
Loans and advances to credit institutions	243,176	5	6.4	6.5
General government	72,810	20	1.7	2.0
Other private sectors	2,364,915	0	65.7	63.7
Debt securities	505,536	28	10.9	13.6
Other equity instruments	74,491	5	2.0	2.0
Investments	42,485	11	1.1	1.1
Derivatives	149,232	-24	5.4	4.0
Tangible assets	46,334	13	1.1	1.2
Other (a)	127,965	23	2.9	3.4
TOTAL ASSETS	3,715,059	3	100	100
MEMORANDUM ITEMS				
Financing to private sector	2,510,229	0	69.5	67.6
Financing to general government	325,923	42	6.4	8.8
Total doubtful assets	113,618	48	2.1	3.1
Total doubtful assets ratio	3.57	105 (c)		
Provisions for bad debts and country risk	69,261	26	1.5	1.9
LIABILITIES AND EQUITY	DEC-09	CHANGE DEC-09/ DEC-08	RELATIVE WEIGHT DEC-08	RELATIVE WEIGHT DEC-09
	(€m)	(%)	(%)	(%)
Balances from central banks	123,522	-8	3.7	3.3
Deposits from credit institutions	507,791	6	13.3	13.7
General government	94,419	1	2.6	2.5
Other private sectors	1,739,690	6	45.6	46.8
Marketable debt securities	622,332	-1	17.5	16.8
Derivatives	134,294	-25	4.9	3.6
Subordinated debt	102,204	13	2.5	2.8
Provisions for pensions, tax and other	35,153	-2	1.0	0.9
Other (a)	129,832	6	3.4	3.5
TOTAL LIABILITIES	3,489,237	2	94.5	93.9
MEMORANDUM ITEMS				
Eurosystem net lending (b)	76,105	20	1.76	2.0
Minority interests	13,356	36	0.3	0.4
Valuation adjustments relating to total equity	-592	-94	-0.3	0.0
Own funds	213,058	7	5.5	5.7
TOTAL EQUITY	225,822	13	5.5	6.1
TOTAL LIABILITIES AND EQUITY	3,715,059	3	100	100
MEMORANDUM ITEMS TOTAL ASSETS OF:	DEC-09		RELATIVE WEIGHT DEC-08	RELATIVE WEIGHT DEC-09
	(€m)		(%)	(%)
Five biggest banks	2,202,015		59.1	59.3
Twenty next biggest banks	901,234		24.6	24.3
Other banks	611,811		16.3	16.5

SOURCE: Banco de España.

- a. The remaining assets and liabilities entries not explicitly considered, including valuation adjustments, are included in "Other".
b. Difference between funds received in liquidity providing operations and funds delivered in absorbing operations.
c. Difference calculated in bp.

The Banco de España Executive Commission meeting of 29 July 2009 approved the action plan that was requested of CajaSur and was submitted jointly by Caja de Ahorros y Monte de Piedad de Córdoba (CajaSur) and Montes de Piedad y Caja de Ahorros de Ronda, Cádiz, Almería, Málaga y Antequera (Unicaja) in accordance with the provisions of Articles 10 and 11 of Royal Decree 2606/1996 of 20 December 1996 on credit institution deposit guarantee funds, in order to carry out the restructuring needed at CajaSur (at December 2009 this institution recorded a loss of €596 million, equivalent to 3.1% of its total assets).

This plan forms part of the merger process between these two institutions that includes, inter alia, additional write-downs of assets of CajaSur and the rationalisation of management structures and of resources to enhance

efficiency. The support of the Savings Bank Deposit Guarantee Fund is established for the resulting entity; this support will consist of:

- The granting by the Savings Bank Deposit Guarantee Fund of an asset protection scheme associated with a closed portfolio. A maximum loss of €550 million would be assumed by the Deposit Guarantee Fund and the duration would be five years from the grant date.

- The acquisition of €440 million of preference shares by the Savings Bank Deposit Guarantee Fund to strengthen the solvency of the new savings bank, with indefinite maturity and earning fixed interest for the first 17 years. The resulting institutions' solvency ratio will stand comfortably above the recommended levels in 2011 and 2012.

to rise, but at a lower rate than in previous quarters.

December 2008). The increase in doubtful assets and the sluggishness of lending explain why the doubtful assets ratio⁴ increased by 1.1 percentage points (pp) with respect to December 2008 (3.6% in December 2009), although its pace has also slowed (in June 2009 the ratio was 3.3%). As noted below, the doubtful assets ratio of the resident private sector in Spain has followed a similar pattern, i.e. it has increased, reaching 5% in December 2009, but at a slower pace. In any case, as long as the real economy remains weak, bad debts will, as noted in previous FSRs, continue to rise.

Funds obtained from the ECB held stable in relation to the capital key, and their weight in the consolidated balance sheet was low.

On the **liabilities** side, the rate of change of deposits from central banks decreased, as did cash and balances with central banks (asset-side item). Like the institutions of other euro area countries, Spanish institutions had greater recourse to the liquidity provided by the ECB, as reflected by the higher net lending (the funds received in liquidity providing operations minus those deposited in liquidity withdrawal operations). ECB funding to Spanish institutions (Eurosystem net lending) is in line with the size of the Spanish economy in the euro area (see Chart 2.5.D) and its weight in bank balance sheets remains low (2% in December 2009, Table 2.1).

Despite the improvement in recent months, the wholesale funding markets remain in a difficult situation subject to uncertainty, which explains the fall-off of 1% in the marketable debt securities item. However, the year-on-year rate of change of this variable was -4.8% in June 2009 and -4.3% in December 2008. In consonance with these signs of improvement, subordinated debt grew by 13% in December 2009 (1.2% in December 2008).

Deposits grew, but at a lower rate than in previous quarters.

Spanish deposit institutions have increased the deposits taken from the private sector, which in December 2009 grew year-on-year by 6%,⁵ although the pace has slowed in recent months.

Spanish institutions strengthened their own funds.

Spanish deposit institutions have strengthened their **own funds**, which grew at a rate of 7% in December 2009, their weight in bank balance sheets rising from 5.5% in December 2008 to 5.7% in December 2009 (Table 2.1).

⁴ As is customary practice in the FSR, the terms bad debts and doubtful assets are used as synonyms, although technically doubtful assets include others in addition to those in arrears. ⁵ Excluding the effect of changes in the scope of consolidation of a large Spanish institution, the growth rate of deposits is more subdued, standing at 1.2%, although exceeding that of credit to the sector.

As a mitigating factor of the high cost of a potential public bail-out of major systemic banking groups, and of the moral hazard associated therewith, international fora are studying the co-ordinated adoption of a series of measures. These include most notably capital and liquidity surcharges, restrictions on size and activity, various types of taxes on banking activity, and the drawing up of recovery and resolution plans, also known as living wills.

Living wills are documents that reflect how prepared a bank and the supervisory authorities are when faced with a crisis. Broadly, living wills comprise two different parts: the first envisages the last-resort measures that the group would adopt to sustain its core business and avert collapse; the second contains the measures that the authorities would adopt to wind up the institution in an orderly fashion without causing market dislocations. In addition, the living will also includes the information needed to undertake the recovery or resolution process.

There will be an individualised plan for each major international group, approved in a co-ordinated manner by the home authorities of the parents and the host authorities of its significant subsidiaries. These will be called on to manage potential financial crises that may affect systemic banks, and will be assigned to "crisis management groups". The composition, organisation and functioning of these groups will be eminently flexible, involving the relevant institutions in each situation. These institutions will be the designated supervisors of the group, the national central banks and

the finance ministries of the countries concerned, although the authorities responsible for resolutions and deposits guarantee schemes may also be included. They are scheduled to meet at least once a year, or even more frequently if necessary.

The existence of these contingency plans, which must be kept updated, is useful to a degree beyond specific crisis-management measures; living wills are in fact a very important instrument for the authorities in exercising regular supervision and also for managers in terms of the proper administration of their group.

The Banco de España has traditionally set great store by prudent management, with the appropriate control of risks. While it does not impose any structure on institutions under its supervision, the organisation adopted by the major groups is a significant factor of analysis for the supervisor. In addition, the international expansion of Spanish banks has typically unfolded via subsidiaries with a high degree of financial autonomy. This subsidiaries-based structure contributes, better than other organisational structures, to segregating the various group units from episodes of crisis originating in other units, providing for their orderly resolution and, consequently, for the drawing up and viability of these plans. If, under this framework, moves are made to impose prudential surcharges on systemic institutions, the presence of viable living wills is a factor to be taken into account that may mitigate systemic risk.

The weight of business abroad increased relative to 2008, but the risks arising from these exposures remained contained.

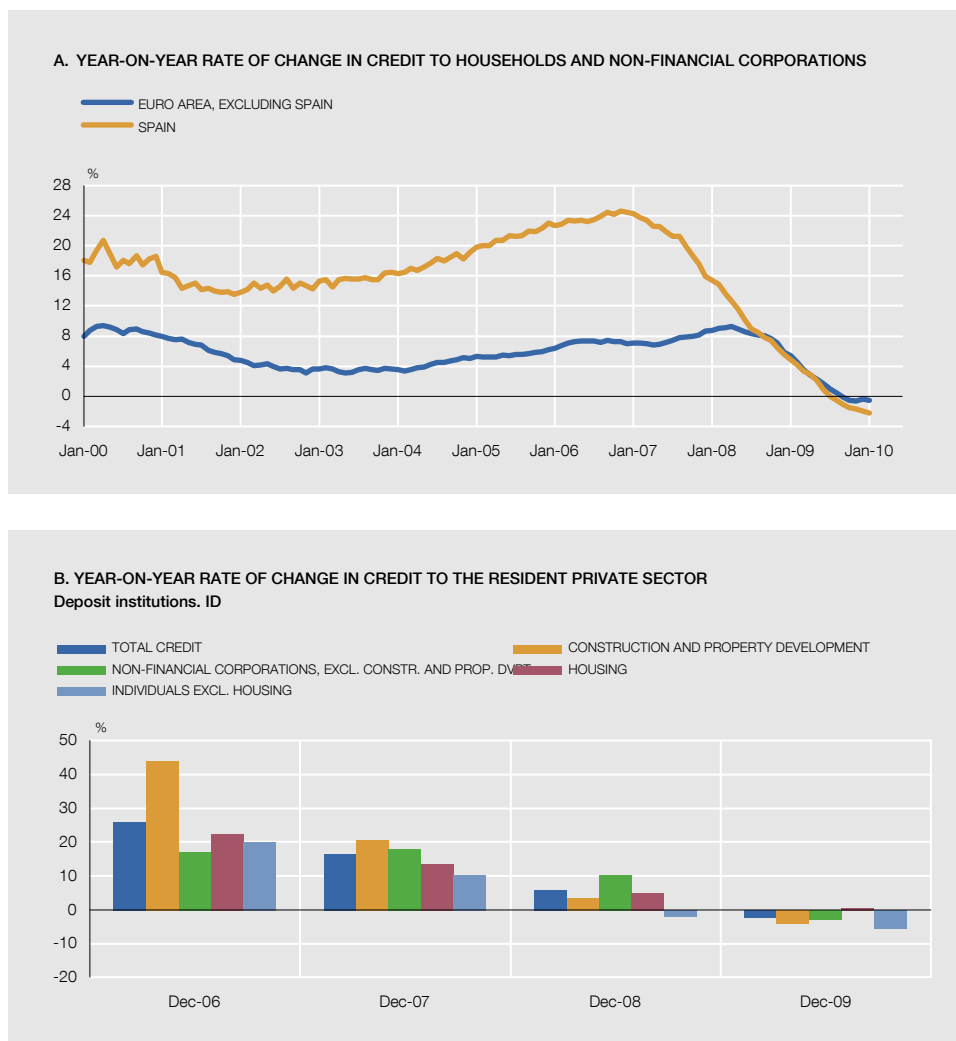
The relative weight of **business abroad**, measured in terms of total assets, was 23.6%, up 2 pp on December 2008, largely explained by the acquisitions made by a large Spanish institution. Over the last few years Spanish institutions have further diversified their assets located abroad, initially concentrated in Latin America, towards countries in the European Union and the United States. The risks associated with these exposures currently remain contained, to which may be added the structural characteristics of the typical model of expansion of Spanish banks through subsidiaries enjoying a high degree of financial autonomy (see Box 2.2).

The downward trend of credit to the resident private sector in Spain intensified,...

Credit to the resident private sector in Spain intensified its downward trend since the publication of the previous FRS, posting negative rates of change in December 2009 for deposit institutions as a whole (-2%, against 1% in June 2009 and 6% in December 2008). The latest available data, relating to January 2010, show that this trend persists, with credit dropping by -2.7% year-on-year.

... owing to lower demand and to deteriorating customer credit quality, leading institutions to tighten their credit standards.

The difficult conditions faced by the Spanish economy explain this trend in credit to the resident private sector, a trend which will foreseeably persist in the coming months. The worsening of the economic cycle implies that firms and households will demand less credit, and that institutions will tighten their credit standards in response to deteriorating customer credit quality and increasing doubtful loans. Also, to the uncertainty surrounding the behaviour of the Spanish economy must be added that still persisting in the international wholesale funding markets. In any event, the expected values of future changes in credit should be much more in line with those prevailing in the euro area than with those in the Spanish banking system in the first half of this decade (Chart 2.1.A).



SOURCES: ECB and Banco de España.

The evidence available does not confirm that the institutions that are facing greater uncertainty and difficulties are granting less credit than their peers. However, in the future these difficulties may ultimately affect credit growth at these institutions. The FROB has been designed specifically to prevent this risk from materialising.

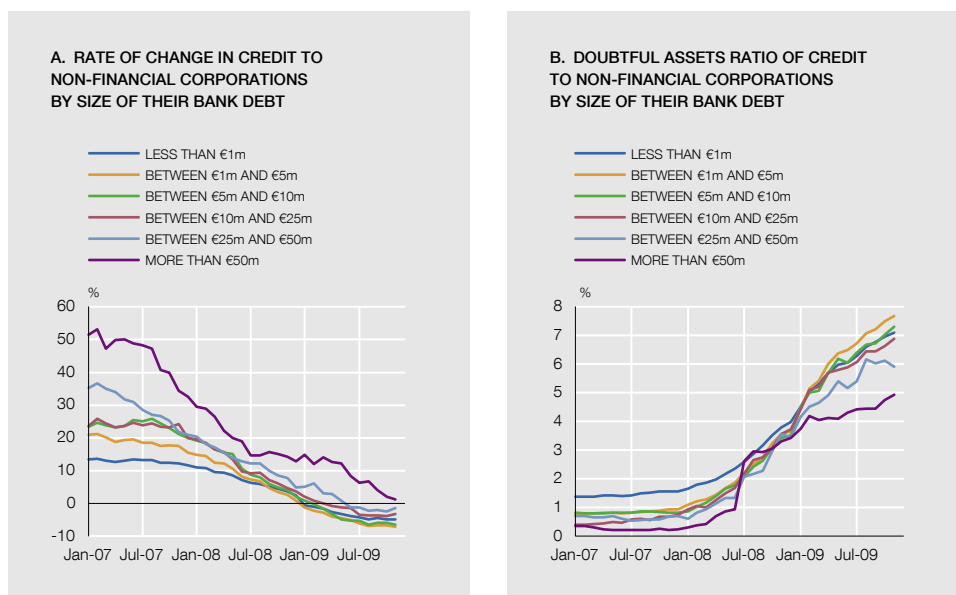
When credit growth rates are analysed for each individual institution against variables reflecting their economic-financial situation (doubtful assets ratios, solvency, profitability, etc.), the correlations obtained between these variables and credit growth are very weak. Moreover, this is confirmed by anecdotal evidence: some institutions that are not facing significant difficulties post higher-than-sector-average rates of decline in credit, while for others that are facing more difficulties the situation is quite the opposite.

The slowdown in credit is across the board. It is sharpest in household consumer credit...

Credit is decelerating in the various business segments (Chart 2.1.B). Lending to households for house purchase still shows positive year-on-year rates of change (0.6% in December 2009), although they are low and the trend is one of deceleration. The differences between this type of lending and household consumer credit explain why the latter has shown negative rates of growth since end-2008, standing at -5.4% in December 2009. However, since mid-2009 the sharpness of the fall in consumer loans to households has tended to ease.

CREDIT TO NON-FINANCIAL CORPORATIONS BY SIZE OF THEIR BANK DEBT (a)
Deposit institutions. ID

CHART 2.2



SOURCE: Banco de España.

a. Size is approximated by the total credit volume of the corporations in the Central Credit Register (CCR).

... and in construction and property development firms.

Within non-financial corporations, the credit behaviour of construction and property development firms disregarding foreclosures is more negative, recording a negative rate of change of 4.1% in December 2009, after having grown at rates above 40% in late 2006. Credit to other non-financial corporations also fell in December 2009, but both its negative rate of change (-2.9%) and its deceleration were less sharp.

For firms, the slowdown in credit has generally been irrespective of their size, although it has diminished somewhat more sharply for those which, on the basis of their size, have a higher doubtful assets ratio.

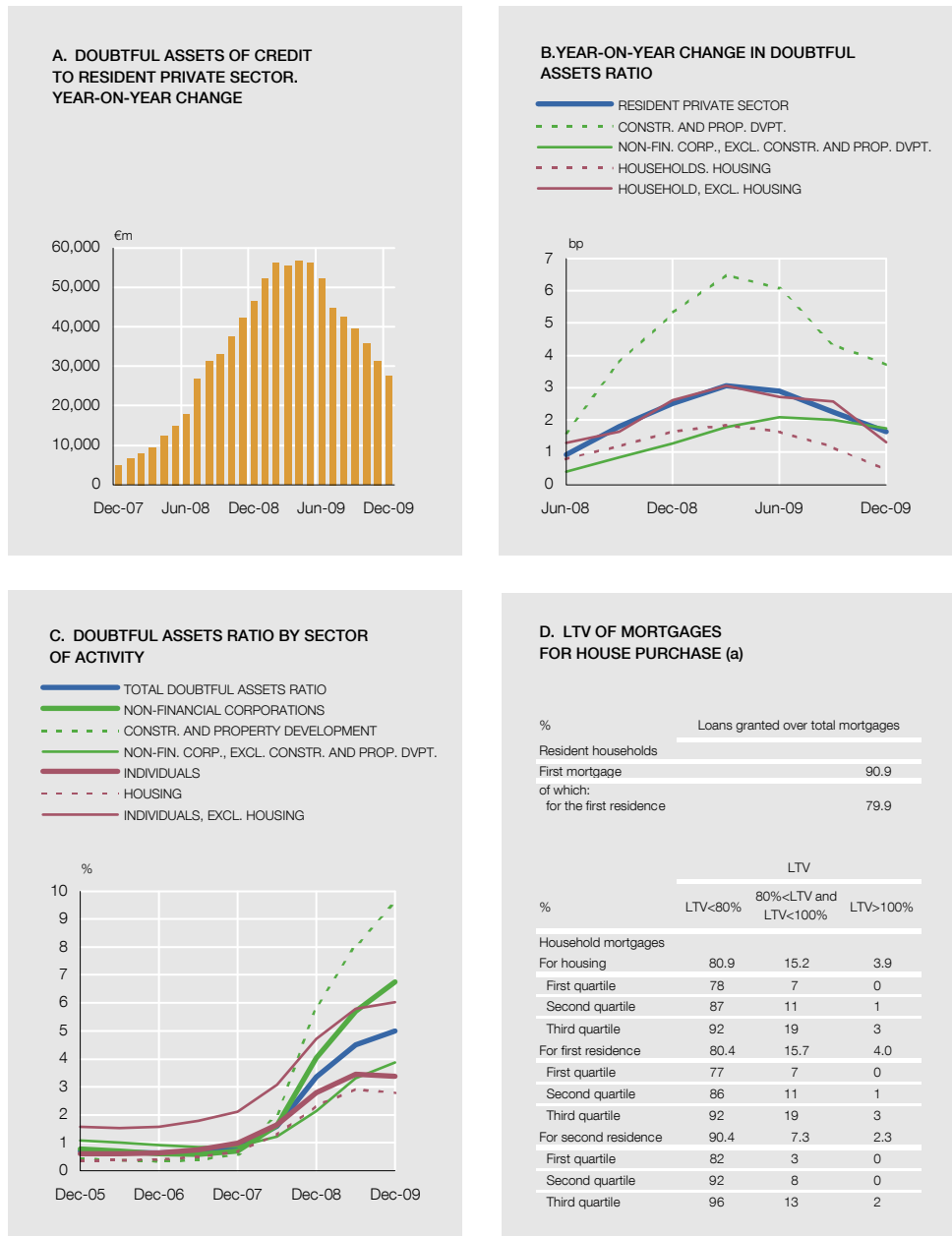
The slowdown in credit to non-financial corporations extends across all firm sizes, although a certain relationship can be observed which indicates that credit to smaller firms, as measured by their bank debt, is falling off most sharply (Chart 2.2.A). This order was also apparent when credit was growing more strongly. However, as shown by Chart 2.2.A, the gap in loan growth rates between larger firms and smaller ones, which favours the former, closed in 2009 and the traditional differences, still discernable until July 2009, dissipated. This order is the inverse of that of the doubtful assets ratio of non-financial corporations based on size, measured in the same way (Chart 2.2.B); that is to say, and this phenomenon is all the more marked in the present circumstances, credit institutions closely link the granting of credit to the credit quality of the potential borrower.

Doubtful assets of the resident private sector in Spain grew, but less sharply, ...

Doubtful assets of the resident private sector in Spain grew by 45.3% year-on-year in December 2009 (33.8% in January 2010, the most recent figure available). Although this growth rate continues to be high, the rate of increase of doubtful assets has moderated significantly over the last few months (Chart 2.3.A).

... on a par with the doubtful assets ratio, whose growth was less sharp for the different sectors of activity.

The **doubtful assets ratio of credit to the resident private sector in Spain** for deposit institutions as a whole stood at 5% in December 2009 (4.5% in June 2009 and 3.3% in December 2008). The ratio remains high and continues to trend upwards, as confirmed by the most recent data (5.2% in January 2010), although in recent months a more moderate pace has been observed in the different sectors of activity (Chart 2.3.B). In any event, the



SOURCE: Banco de España.

a. LTV: ratio of the amount of the mortgage loan to the appraised value of the property.

upward trend will foreseeably persist in the coming months, at least while there are no clear signs of improvement in real activity and employment.

The doubtful assets ratio is higher, and has been growing more sharply, in the sectors whose behaviour is more closely linked to the business cycle, such as household consumer credit...

The doubtful assets ratio is higher in those sectors whose performance is most closely linked to the economic cycle (Chart 2.3.C). Thus, within household credit there are notable differences between lending for house purchase (2.8% in December 2009) and that for other purposes, basically consumption (6% in December 2009). Housing loans represent 82% of total household credit (36% of credit to the resident private sector) and their lower doubtful assets ratio has already been observed in previous recessions in Spain. In 1993 the doubtful assets ratio of housing loans was 4%, compared with a ratio of 8.5% for total loans. Lending for house purchase traditionally has a lower doubtful assets ratio because of the type of

DOUBTFUL ASSETS RATIO OF CREDIT TO THE RESIDENT PRIVATE SECTOR AND OF CREDIT TO CONSTRUCTION AND PROPERTY DEVELOPMENT
Deposit institutions. ID

CHART 2.4



SOURCE: Banco de España.

a. The institutions considered account for 94% of the credit to construction and property development at the reporting date.

business in which Spanish banks engage and because of the particular features of the asset acquired. In Spain not only is there a high percentage of owner-occupied housing, but also the vast majority of home loans are first mortgages (nine out of every ten), and, of these, most (80%) are for purchase of the principal residence. The existence of collateral, and, in particular, the loan amount as a percentage of the collateral value (loan to value, LTV), limits the potential loss of institutions in the event of default. 81% of mortgage loans to households in Spain have an LTV below 80% (Chart 2.3.D).

... and especially credit to construction and property development firms.

The incidence of doubtful assets in credit to the business sector is the inverse of that for credit to households, and is significantly higher for firms in the sectors most closely linked to the real estate cycle (Chart 2.3.C). Thus, the doubtful assets ratio of construction and property development loans was 9.6% in December 2009 while that of lending to all other

firms as a whole was significantly lower (3.9% in December 2009). As reiterated in previous FSRs, construction and property development lending is typically more risky than other types of financing because of its highly pronounced cyclical profile. Thus, in 1993 the doubtful assets ratio of real estate loans amply exceeded that of total credit, standing at 13%. In the current circumstances, in which the adjustment of the real estate market in Spain persists, complicated by its excessive growth in the past, it can be considered that the doubtful assets ratio of loans to firms linked to the property development sector has not yet reached its peak.

The doubtful assets ratio shows a high degree of dispersion across institutions, ...

As argued in previous FSRs, the degree of sectoral exposure and the behaviour of the real economy cannot be considered the only factors explaining the doubtful assets ratio. This is apparent in the high degree of dispersion of the doubtful assets ratio in recessions, which is a reflection of the different credit policies pursued by institutions in the past (Chart 2.4.A).

EXPOSURE OF SPANISH DEPOSIT INSTITUTIONS TO THE PROPERTY SECTOR

BOX 2.3

The exposure to the construction and property development sector represents a significant risk for the Spanish banking sector. This risk is not only due to the fact that the property sector, which is markedly cyclical, is immersed in a very sharp adjustment process, but also because the banking system's volume of exposure in this sector (€445 billion in December 2009) is high.

The volume of exposure to the sector is not, however, equal to the potential loss for the financial system. Placing exposure and potential loss on the same footing means considering, first, that 100% of the borrowers comprising this exposure will ultimately default on their contractual obligations [i.e. it means assuming a probability of default (PD) of 100%]. Second, it also presumes that institutions will have nil capacity to recover troubled loans and the (normally mortgage) collateral securing them (loss given default, or LGD, of 100%). Both assumptions, all the more so considering that the type of financing comprising this exposure is usually secured by collateral, are unrealistic.

The above-mentioned amount of exposure (€445 billion) includes all loans extended to construction and property development firms.¹ It has been decided to treat both sectors jointly because the boundaries between the two, in terms of their statistical classification, are occasionally blurred, and it is not surprising that institutions reclassify loans from one sector to the other. However, not all loans to construction and property development entail exposure to the residential construction and property development sector, where the adjustment problems are concentrated. Indeed, firms from these sub-sectors are active in the energy, airport infrastructure and oil markets, inter alia. Further, construction activity arising from public investment in railway or highway infrastructure does not pose particular difficulties either. If exposure to these two activities (estimated at around €43 billion) is subtracted, the exposure associated with residential construction and development stands at around €402 billion for deposit institutions as a whole (commercial banks, savings banks and credit cooperatives).

¹ Note that, as is usually the case in the FSR, deposit institutions as a whole are being considered, i.e. commercial banks, savings banks and credit cooperatives, which excludes specialised credit institutions (SCIs) from the analysis. Beyond the consistency of this approach with the rest of the FSR, it should be stressed that SCIs are a very small sub-sector relative to the other institutions, as is also the case for their exposure to the property development sector.

Of the total exposure to the construction and property development sector, institutions' classified doubtful loans amount to €42.8 billion (9.6% of exposure). These are loans in which some instalment has not been paid for a period of more than 90 days, and those exposures in which there are reasonable doubts as to total repayment under the terms agreed (cases such as negative equity, ongoing losses and inappropriate financial structure). Moreover, the classification of a loan as doubtful interrupts the accrual of interest and requires specific provisions to be set aside. The amount of the provisions set aside by institutions for these loans is €17.7 billion, meaning that their coverage with specific provisions is 41.4%.

Of the total amount of exposure, €59 billion relate to substandard loans. These are loans showing some general weakness associated with the fact they are to a specific troubled group or sector, meaning that the risk of the transactions increases, but does not translate into losses for the borrower (they are not loans more than 90 days past-due nor are there other objective signs of borrower weakness requiring them to be classified as doubtful). Provisions are also required for these loans, and the amount provided is €7.6 billion, i.e. the coverage by specific provisions is 12.9%.

As is customary and desirable in a crisis situation such as the present one, credit institutions use tools to manage doubtful loans. In its supervisory capacity, the Banco de España analyses these tools in detail to prevent them from becoming potential mechanisms to defer the recognition of losses.

In exposures relating to the construction and property development sector, and as loans secured by collateral are involved, habitual tools are asset foreclosures, dation in payment and acquisitions. Asset ownership passes to the credit institutions, either as a result of legal debt-enforcement proceedings (foreclosure), of standard debt-settlement procedures between the debtor and the credit institution (dation), or of acquisitions. These assets amount to €59.7 billion.² Here, too, the Banco

² This amount is potentially biased upwards, as there is overlap between exposure to the sector and acquisitions. For example, financing granted by an institution to its real estate subsidiary to acquire assets from property developers will be counted twice, as an exposure to the sector and also as an acquisition.

de España requires provisions for these assets held on balance sheets. The related provisions amount to €13 billion, entailing coverage of 21.8%.

Loan refinancing is another management tool used by institutions. The accounting treatment for the purpose of provisioning is, as a general rule, that it should not interrupt the calculation of doubtful assets (unless there is reasonable certainty that the customer can meet the payment or new effective collateral is provided). In any event, they will be classified as normal, doubtful or substandard loans depending on the particular characteristics, and they will therefore be subject to the related provisions and, moreover, to supervision by the Banco de España.

Finally, the loan write-offs pertaining to the sector amount to €4 billion and, as required by accounting legislation, are covered in full by provisions.

Accordingly, the potentially troubled exposure (the sum of doubtful assets, substandard loans, foreclosures, defaults in payment and acquisitions, as well as loan write-offs) amounts to €165.5 billion. All the loans grouped in this category show, albeit to differing degrees, some sign of potential problems and Banco de España accounting rules therefore require specific provisions be set aside. The amount of the specific provisions in December 2009 was €42.3 billion, entailing coverage of potentially troubled exposure of 25%.

The arrangements for loan loss coverage in Spain also involves general provisions, whereby deposit institutions have a stock of general provisions set aside during economic upturns. Including this stock, but not in its entirety (provisions relating to business abroad are excluded), the coverage of potentially troubled exposure rises to 35%. This means that the sector as a whole could absorb a loss of 35% of its potentially troubled construction and property development portfolio³ without having to record any additional loss in the income statement.

Coverage via the provisions already set aside by institutions is not the only line of defence against the losses that might arise from potential problem loans; regard should also be had to their ability to generate profits. In 2009 Spanish deposit institutions' recurring income (net operating margin)

3. Note that the value of the collateral backing this type of loan is usually greater than the book value of the loans (almost 87.3% of the collateralised loans granted to developers have an LTV of less than 80%), meaning that this percentage (35%) may be higher.

grew by 18%, despite the difficult economic and financial environment in which activity was pursued. Assuming a level of recurring income in 2010 equal to that observed in 2009, deposit institutions as a whole have a coverage of potentially troubled exposure to the construction and property development sector of 71%. Predicting the future course of such income is a matter of judgement and, therefore, subject to numerous discussions about the assumptions and scenarios used. But, in any event, in the light of the foregoing data, it appears that the sector as a whole has provisions in place for declines of over 50% in the average realisable value of collateral, without having to record additional losses. And this estimate does not consider the own funds that institutions hold, which were notably strengthened in 2009.

The foregoing data refer to deposit institutions as a whole. But as mentioned throughout this FSR (see Chart 2.4), there is a high degree of heterogeneity across institutions, not only in terms of their relative exposure to the construction and property development sector, but also in terms of how institutions are responding and their ability to withstand such exposure.

Heterogeneity can also be seen in the collateral for this type of financing, which affects both the effectiveness thereof and, therefore, the ability of institutions to recover loans. This requires prudent valuation since, for instance, not all collateral becomes market-ready and can be converted into cash at the same pace (finished housing in established urban zones as opposed to, for example, buildable land).

In any case, the FROB is a suitable mechanism for institutions that show less resilience and greater difficulties in resolving their problems. The sphere of action of the FROB is not confined solely to the restructuring of institutions that show weaknesses affecting their viability; it is also designed to promote merger and acquisition processes between institutions which, without being in grave danger, seek to improve their efficiency and adjust their size and capacity in the medium-term through the reinforcement of their own funds.

Beyond having a mechanism such as that described to facilitate adjustment, tackling the current difficulties certain institutions face involves increasing the information they convey to the market about their potentially troubled exposure, the degree of coverage and their loan recovery and management policies.

LENDING BY DEPOSIT INSTITUTIONS TO THE CONSTRUCTION AND PROPERTY DEVELOPMENT SECTOR. EXPOSURE AND COVERAGE. DECEMBER 2009

TABLE A

	Amount (€bn)	% of lending	Specific coverage (€bn)	% specific coverage
Lending	445.0			
of which:				
Doubtful	42.8	9.6	17.7	41.4
Substandard	59.0	13.3	7.6	12.9
Foreclosures	59.7	13.4	13.0	21.8
Write-offs	4.0	0.9	4.0	100.0
Potentially troubled exposure	165.5	37.2	42.3	25.6
% of coverage including general provisions				35.0
% of coverage including net operating income. December 2009				71.0

...which not only depends on their relative exposures, but most significantly on their credit and credit risk management policies.

Thus, in exposure to the construction and property development sector, both the relative weight in the credit portfolio and the associated doubtful assets ratios vary significantly from institution to institution.

The possibility of withstanding the potential losses arising from doubtful assets depends on institutions' loan recoverability capacity (LGD), on their recurring income and on the provisions they have made.

The relevance of institutions' credit policies to loan selection and risk management is clearly illustrated by the case of lending to construction and property development firms in Spain. The exposure to the construction and property development sector is, for the reasons stated above and in view of its volume, a significant risk for the Spanish banking sector. To value this exposure adequately, it must be taken into account not only that it affects institutions unevenly, but also that the volume of the exposure cannot be related to the potential loss of the sector (see Box 2.3).

The wide range of the exposure to construction and property development firms is reflected both in their weight in institutions' credit portfolios (Chart 2.4.B) and in deposit institutions' doubtful assets ratios associated with this exposure (Chart 2.4.C). Moreover, if exposure to and default on this type of credit are analysed together, it is clear that different institutions have selected and manage these risks differently. Indeed there is substantial dispersion between institutions, as some have high exposure and very low doubtful assets ratios in this credit segment while, at the other end of the scale, others have low exposure but high doubtful assets ratios (Chart 2.4.D).

How institutions handle the impact of these higher doubtful assets ratios depends not only on their ability to generate recurring income, but also on the loan loss provisions established to this effect. This is especially relevant in the case of Spain, due to the system of specific provisions based on clear, transparent and objective rules, and to the dynamic provisioning system which has enabled institutions to make provisions against retained earnings during the last cyclical upturns (see Box 2.4).

SPAIN'S DYNAMIC PROVISIONING SYSTEM

BOX 2.4

On information at December 2009, the stock of specific provisions continues to grow, and now amounts to almost 1.5% of all loans and receivables, while in line with the automatic mechanism of dynamic provisioning, the stock of general provisions continues to decline as a percentage of lending, standing at around 0.5% at end-2009 (Panel A). As a result of these contrasting patterns, the stock of total provisions as a percentage of total loans and receivables continues to grow, but at a much lower rate than specific provisions. This is a fundamental characteristic of the Spanish provisioning system, as amended in 2004 to adapt it to IFRS: total provisions increase in downturns, although to a lesser extent than if the countercyclical mechanism did not exist, signifying that total provisions are less procyclical, without being completely insensitive to the cycle.

Coverage levels through general provisions vary between institutions, according to the degree of use which, in turn, depends on the specific provisions and, in short, on the doubtful asset ratios. Thus, among the deposit institutions that represent 95% of total credit to the private resident sector, the stock of general provisions as a percentage of loans and receivables ranges from 1.49% to 0.02%, a clear indication of the different past performance of institutions' lending policies and of their reflection in current doubtful assets and the attendant write-down.

The flow of provisions follows a similar pattern (Panel B), clearly reflecting the macroprudential effect (lower procyclicality) inherent in the Spanish provisioning system: between mid-2007, when lending entered a phase of deceleration, and end-2009, the flow of specific provisioning as a percentage of loans and receivables grew more than tenfold, while the flow of total provisions merely doubled.

The countercyclical mechanism of dynamic provisioning is based on the comparison between expected losses and specific provisions. Indeed, in algebraic terms, Spain's loan loss provisions may be written as a function of the expected loss in each of the six credit portfolios considered. It is precisely this expected loss approach that the IASB (International Accounting Standard Board) is moving towards since publishing, in November 2009, its proposal for a new methodology for determining the level of loan loss provisions.¹

If this proposal comes into effect, the present incurred loss model will be replaced by an expected loss model, an approach that has underpinned the Spanish provisioning model since mid-2000. Nevertheless, the specific

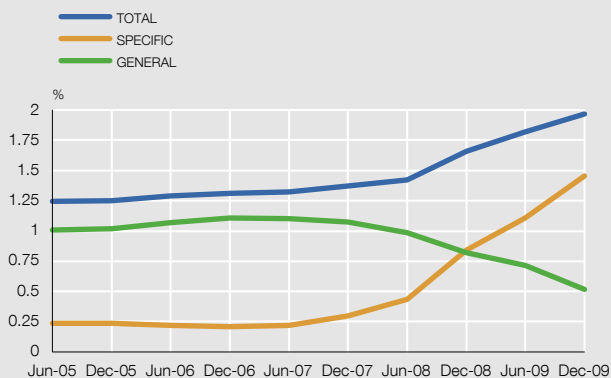
¹ Spain played an active role in the debate promoted by the IASB for improving the provisioning system. In this respect, see <http://www.bde.es/webbde/es/secciones/prensa/intervenpub/diregen/regula/regula170609e.pdf>.

form of the IASB proposal may make a review of the calculation methodology used for Spanish provisioning advisable.

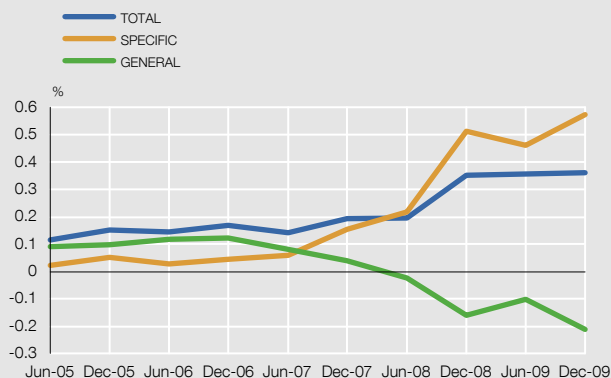
In short, Spain's dynamic provisioning system has reduced, in a transparent manner, the procyclicality of specific provisions and, therefore, the impact on institutions' income statements, just when these statements

are under great pressure. This is precisely the situation in which the advantages of this provisioning model, both from a micro- and a macroprudential standpoint, come into play, even though, naturally, and given the magnitude of the current economic and financial crisis, this may not be sufficient to ensure that all institutions are able to accommodate all the credit risk exposure on their balance sheets.

A. STOCK OF PROVISIONS/LOANS (a)
Deposit institutions



A. FLOW OF PROVISIONS/LOANS (a)
Deposit institutions



SOURCE: Banco de España.

a. Deposit institutions, excluding European foreign branches.

Conditions on wholesale funding markets remain difficult, ...

Funding conditions in the international financial markets remain tight for financial institutions, as the signs of improvement seen in these markets in recent months were interrupted by the emergence of the problems connected with Greece's public finances. The package of temporary and extraordinary measures introduced by governments and central banks to stave off a widespread loss of confidence, which prompted a shutdown among the main wholesale funding markets, remain in place (see Chapter 3). The timing and pace of their withdrawal is currently one of the most difficult questions facing economic and financial policymakers.

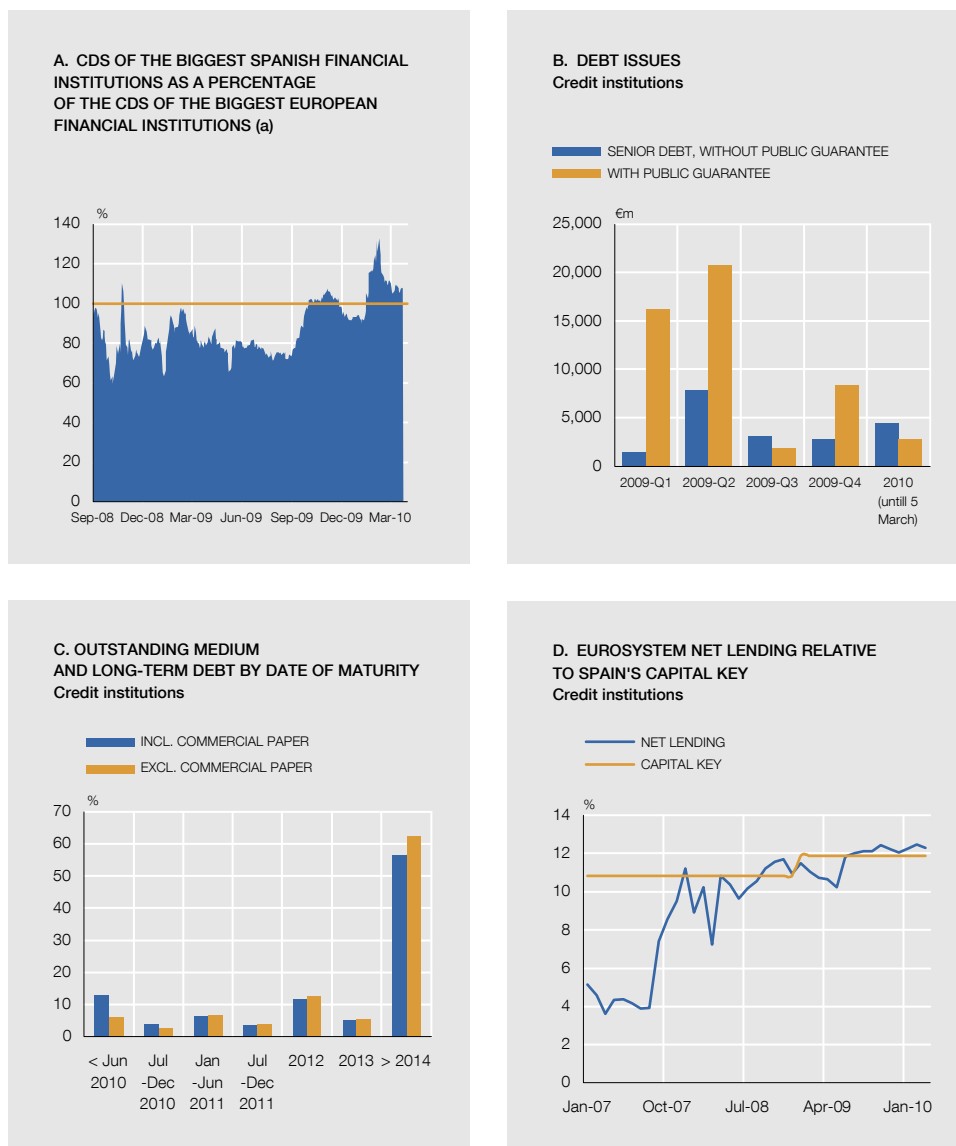
One indication that the international financial markets are still not fully recovered is that some markets that were key before summer 2007 (such as the securitisations market) remain firmly closed. Others, such as the interbank market, are still not operating normally.

... and are compounded by the contagion effects of situations such as that of the Greek economy ...

The episode relating to Greece's economic problems reflected this persistent uncertainty and lack of market confidence. At the peak of the uncertainty surrounding the difficulties in Greece, the sovereign credit spreads of other euro area countries, including Spain, tightened significantly, and this despite the differences between the economic reality of the two countries.

... and the uncertainty arising for investors from the adjustment of the Spanish economy.

In any case, the market perception of Spain's economic difficulties with respect to its debt levels and the need for economic adjustment – to the extent that it tightens sovereign credit spreads – will make it more difficult for Spanish deposit institutions, and especially those the market perceives to be the weakest players, to obtain financing. The CDS spreads of the big Spanish institutions have traditionally outperformed the average



SOURCES: Market data and Banco de España.

a. A value of less than 100 indicates a relative better performance of the Spanish institutions.

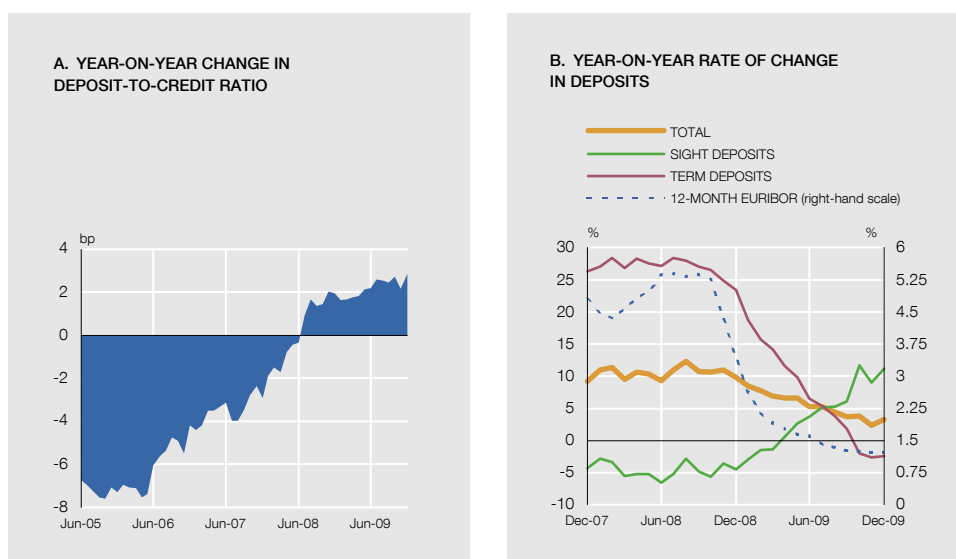
of their European peers, except at the point of maximum tension connected with the difficulties in Greece (Chart 2.5.A).

Spanish institutions, in particular the biggest ones, have been able to issue debt on international markets, ...

In this still uncertain environment, Spain's larger institutions, which had been able to access the senior debt markets throughout 2009, placed around €4.5 billion in senior debt at the beginning of 2010 (Chart 2.5.B). Issues of covered bonds (excluding securitisations), one of the market segments most affected by the international financial crisis, amounted to approximately €22 billion in 2009 and a number of institutions gained access to this market in early 2010.

...while the resort to State guarantees has been less intense, although this guarantee facility is open to June this year.

The difficulties involved in accessing international funding markets, especially for institutions that the market perceives as weak, explain why, in 2009, the volume of debt issuance backed by State guarantee exceeded that of senior debt issuance (Chart 2.5.B). In the opening months of 2010, debt issues backed by State guarantee totalled €2.8 billion, although the rate of issuance has declined as the year has progressed (see



SOURCE: Banco de España.

Chapter 3). In this respect, several institutions will conceivably make use of the guarantee lines still available up to June 2010, albeit to a different degree, according to their respective funding needs and ability to tap the markets.

The term structure of Spanish debt is concentrated in the medium and long terms, which partly mitigates refinancing risk.

As has traditionally been the case, Spanish institutions' debt issues are mostly medium and long-term, attenuating the debt refinancing risk. In this respect, and as noted in previous FSRs, the wholesale funding of Spanish institutions, concentrated on the medium and long term, reduces the risk of raising funds in what is still a difficult time in the international financial markets. Thus, as shown in Chart 2.5.C, 60% of medium and long-term debt held by Spanish institutions matures as from 2014. Moreover, including commercial paper makes no significant change to the maturity calendar, apart from a logical but moderate increase in the shorter term maturities.

Funds obtained from the ECB, after rising in the early stages of the crisis, are holding at around the capital key.

Similarly to other euro area institutions, Spanish deposit institutions have been obtaining more funds from the ECB (Eurosysteem net lending) since the onset of the crisis. However, the volume of funds thus obtained is in line with the relative size of the Spanish economy (capital key⁶) and, after an initial rebound when the international financial crisis first broke, it has remained close to that benchmark level (Chart 2.5.D). As indicated earlier, in terms of the consolidated balance sheet, this value is only a small proportion (2% in December 2009).

Institutions have stepped up deposit-raising,...

The international financial crisis has prompted dramatic changes in the wholesale funding markets in comparison with the situation before summer 2007. In this setting, Spanish deposit institutions have stepped up their efforts to **attract deposits**, thus strengthening their traditionally sound retail funding base.

Over the years previous to the international financial crisis, Spanish deposit institutions had tapped the international financial markets to fund part of the growth in their activity, resulting in a decrease in their deposits relative to credit granted. But this trend reversed in July 2008; since then, the year-on-year change in the ratio of deposits over credit of firms and households has been positive (Chart 2.6.A).

6. The capital key is the percentage share of each national central bank in the capital of the ECB.

INCOME STATEMENT
Deposit institutions

TABLE 2.2

	DEC-09		DEC-08	DEC-09
	€m	% CHANGE DEC-09/ DEC-08	% ATA	% ATA
Financial revenue	143,123	-18.1	5.52	4.14
Financial costs	72,648	-38.1	3.70	2.10
Net interest income	70,475	22.7	1.81	2.04
Return from capital instruments	2,437	-10.4	0.09	0.07
Share of profit or loss of entities accounted for using the equity method	2,312	-47.1	0.14	0.07
Net commissions	21,844	-0.3	0.69	0.63
Gains and losses on financial assets and liabilities	10,846	27.9	0.27	0.31
Other operating income	4	-99.4	0.02	0.00
Gross income	107,920	12.9	3.02	3.12
Operating expenses	46,667	6.9	1.38	1.35
Net operating income	61,253	18.0	1.64	1.77
Asset impairment losses (specific and general provisions)	33,813	49.0	0.72	0.98
Provisioning expense (net)	2,355	-41.9	0.13	0.07
Operating profit	25,085	-0.4	0.80	0.72
Asset impairment losses (assets other than loans and credits)	6,912	242.3	0.06	0.20
Income from disposals (net)	4,660	-18.8	0.18	0.14
Profit before tax	22,833	-21.0	0.91	0.66
Net income	20,078	-18.4	0.78	0.58
MEMORANDUM ITEM				
Income attributable to the controlling entity	18,562	-19.7	0.73	0.54

SOURCE: Banco de España.

... although the growth rate of deposits has been less sharp in recent months ...

The continued rate of growth of deposits won from non-financial corporations and households declined somewhat in 2009, due to the fact that it had risen uninterruptedly in recent years and to the unfavourable economic environment facing Spanish firms and households. The lower interest rates as from end-2008 prompted a readjustment in the respective rates of growth of time and demand deposits. Thus, time deposit growth rates declined from almost 30% between late 2007 and late 2008 to negative growth rates in year-on-year terms in the last three months of 2009, a pattern that was offset in part by the opposite performance of demand deposit growth rates (Chart 2.6.B).

... with the attendant rate of change falling in step with those recorded for the euro area as a whole.

In comparison with other euro area countries, and in particular with the euro area as a whole, the rate of growth of Spanish institutions' deposits has converged towards the euro area average, having risen at a significantly faster pace throughout the previous quarters.

There is heightened competition to raise deposits, and this will persist insofar as institutions adapt their business strategies to

The persistent difficulties involved in accessing international funding markets and the need for institutions to readjust their liabilities, raising the relative weight of their deposits, is intensifying the competition to attract firms' and households' savings, especially in a setting in which other savings products (for example, investment and pension funds) appear to be overcoming the difficulties faced in the last two years. This growing competition to attract deposits also reflects the structural characteristics of the Spanish banking market, and especially its high degree of competition. Spanish deposit institutions will need to adapt their business strategies to this new situation, as it seems unlikely that the growing competition in this market segment will reverse in the short term.



SOURCE: Banco de España.

a. Asset impairment losses include those arising from specific and general loan loss provisions, and those from other assets, which are mainly due to provisions relating to foreclosures.

2.1.2 PROFITABILITY

Deposit institutions' income is 19.7% down on the previous year ...

... as the rise in recurring income has been offset by the increase in loan loss provisions.

Spanish deposit institutions reported consolidated group profit of €18.56 billion in 2009, down 19.7% on a year earlier (Table 2.2). This resulted in a decline in ROA from 0.73% in December 2008 to 0.54% in December 2009 (in pre-tax terms, from 0.91% to 0.66%). The lower profit also put downward pressure on ROE, which stood at 9% in December 2009 (in comparison with 12.9% in December 2008). This reduction in ROE was general across all institutions, although with different rates of decline and different absolute levels in each case (Chart 2.7.A).

The fall-off in consolidated profit is due to contrasting patterns in recurring income and loan loss provisions. Thus, net operating income rose by 18% year-on-year (by 13 bp in terms of average total assets (ATA), to 1.77% in December 2009), while impairment losses, including those from specific and general provisions and those connected with



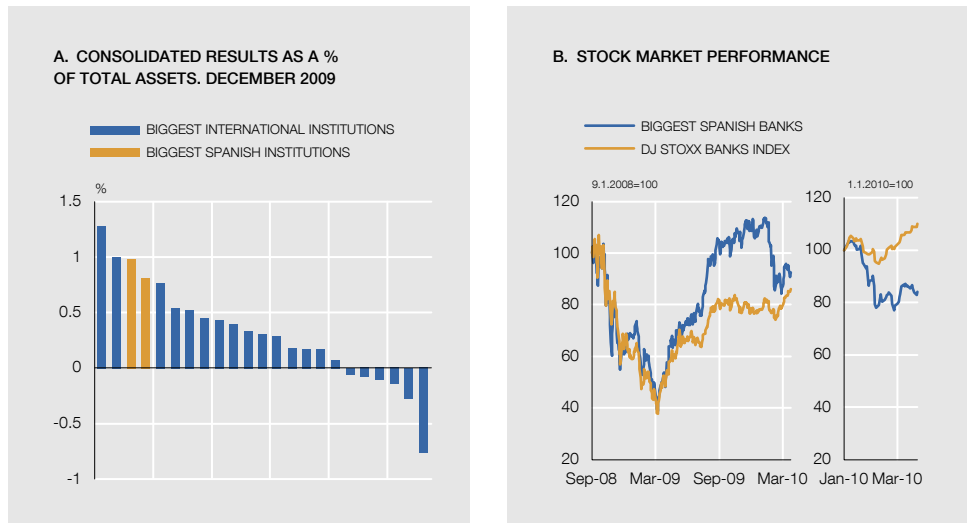
SOURCE: Banco de España.

a. These rates are those established in transactions initiated or renewed during the month prior to that of reference, such transactions being weighted by their volume. The asset-weighted marginal rates include, inter alia, those applied to house and consumer finance and credit to non-financial corporations, while the liabilities ones include, inter alia, fixed-term deposits and repos.

asset foreclosures (see Box 2.3), rose by 65% versus December 2008, representing an increase of 40 bp in terms of ATA to 1.18% (Chart 2.7.B). Impairment losses are detracting a growing proportion of net operating income (67% in December 2009; see Chart 2.7.C), and although this is a significant and widespread impact, differences between different institutions remain.

Net operating income has been mainly driven by net interest income, ...

Net operating income at Spanish deposit institutions has been driven primarily by net interest income, but also by the improvement vis-à-vis December 2008 in net gains and losses on financial assets and liabilities (which were very low at that date, as international



SOURCES: Datastream, company reports and Banco de España.

financial markets headed down) and by the relatively moderate performance of operating expenses (Chart 2.8.A).

... but the marked rate of increase of the latter will foreseeably slacken.

Net interest income was up 22.7% year-on-year at December 2009, an increase of 23 bp in terms of ATA to 2.04%. However, in quarterly terms, net interest income decelerated throughout 2009 (Chart 2.8.B). Previous FSRs had already envisaged that net interest income would be unlikely to continue to post the growth rates seen in previous quarters, and the current trend will foreseeably continue in coming quarters, not only because activity is likely to remain flat, but also because the positive impact of lower interest rates, which are generally reflected in the cost of debt before they are passed through to rates applied to loans, will disappear.

Moreover, competition for deposits among Spanish deposit institutions has become more fierce, as is reflected in the higher interest rates offered on new deposits. Chart 2.8.C shows that rates applied to new deposits, which had been heading down since 2008 Q3, rebounded in 2009 Q4, exceeding EURIBOR. Against the present backdrop of fierce competition for deposits, EURIBOR may well have ceased to serve as a valid benchmark for comparing institutions' retail funding costs, especially considering the stable spread between rates applied to loans and deposits, although this spread has tended to narrow in recent months.

Operating expenses have fallen in relative terms...

The quarterly performance of the main components of net operating income also shows continued flat commission income and limited cuts in operating expenses (Chart 2.8.B). In fact, operating expenses post a year-on-year rate of growth of 6.9%, down 3 bp in terms of ATA to 1.35% (Table 2.2). Nevertheless, excluding one of the large institutions that has recorded above average increases due to recent acquisitions that distort the year-on-year comparison, operating expenses are more contained (-0.9%).

... but cuts in branch numbers are nowhere near enough to offset previous openings.

Given the pressure on income statements discussed earlier, each institution will have to assess, in an appropriate manner, whether or not the process of adjustment in terms of operating expenses is sufficient. In this respect, branch numbers have fallen since end-2008 (Chart 2.8.D), but nowhere near enough to offset previous openings. The process of adjustment of operating expenses will foreseeably have to be redoubled, probably with greater emphasis on cost savings at institutions' central services.

The sector, and certain institutions in particular, must undertake restructuring on a greater scale.

Furthermore, against a backdrop of flat growth in real activity, continued pressure from loan losses and a certain degree of exhaustion in the strong rate of growth of net interest income, Spanish deposit institutions will have to undertake intense restructuring. It seems inevitable that the Spanish banking industry, and especially the weaker institutions, will have to become more streamlined, to adapt to the new national and international context.

LOSS SIMULATION EXERCISES

BOX 2.5

Since the onset of the international financial crisis, numerous international organisations and private sector analysts in financial institutions and agencies have compiled and published estimates of potential losses on banks' portfolios and their impact on the institutions, in particular in terms of whether or not they would need to raise additional own funds to continue pursuing their banking business.

On several occasions, the IMF's Global Financial Stability Report (GFSR) has released aggregate estimates of expected losses on banks' balance sheets for the US and the European banking systems. The ECB also recently published its aggregate estimates. In the United States, a stress test was conducted, on a case-by-case basis for each institution, to assess the impact of the crisis and to determine whether or not they would need to recapitalise or shore up their capital. The CEBS has conducted similar exercises on the big European banks, although the findings of these tests have not been published.

Although there are – sometimes significant – methodological differences between these loss simulation exercises or stress tests, the basic outline is generally similar. The first step is to estimate the expected default [in the form of probabilities of default (PD) or doubtful assets ratios] on the investments held on institutions' bank balance sheets. These losses are sometimes estimated using structural models of the behaviour of key economic variables and their impact on credit quality, or by estimating simple relationships between doubtful assets or probabilities of default and the economic variables affecting them (GDP rate of change, interest rates, unemployment rates, indebtedness, etc.). Projections of default or of expected losses may be made on the basis of these hypotheses.

A comparison is drawn below between these losses and the institutions' coverage thereof. Specific and general loan loss provisions are analysed first. If these are insufficient, the next step is to examine the extent to which the income statements are able to absorb losses, which is usually estimated by means of hypotheses and simple relationships between the income statement headings and the main aggregate variables.

Lastly, if net operating income, earnings or capital gains from asset disposals, where appropriate, are not sufficient to meet all the losses, the impact on institutions' own funds is obtained, together with the additional own funds requirements, given the minimum target for institutions' solvency ratios.

The Banco de España has conducted simulation exercises on several occasions, both since the onset of the crisis and earlier. It has also collaborated closely in exercises conducted at the European level, and at the request of international organisations. The findings of some of these

exercises have appeared in the FSR or in other publications (*Notas de Estabilidad Financiera*, no. 5, December 2006, in the case of the exercises conducted under the Financial Sector Assessment Program (FSAP)).

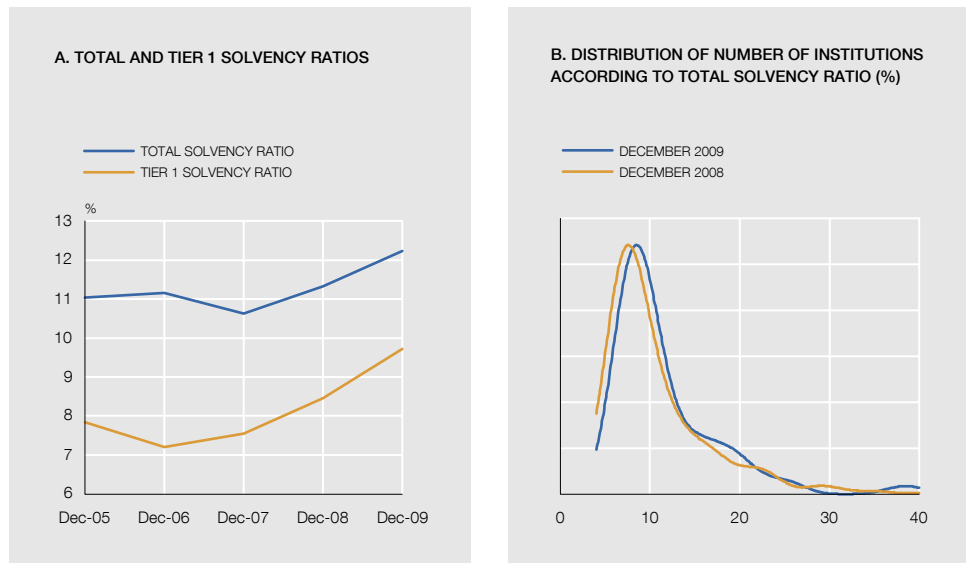
The results of the simulation exercises or stress tests performed by the Banco de España, or by any other organisation or private analyst, are usually very sensitive to the assumptions used, to the detail of the available information and to the timeframe over which the relationships between the most significant variables in the exercise are estimated. Therefore, the results of these simulations must be interpreted with caution, both if the results show high losses and if they show a very high resilience, with hardly any impact on the institutions. Furthermore, at the level of individual institutions there may be enormous differences in terms of impact, with some institutions hardly affected and others needing a highly substantial amount of capital, even so as to hold the minimum levels required by the regulator.

The losses estimated in the various exercises published by the main international organisations range between 15% and 35% of the capital of the banking system or of the group of institutions considered. Thus, in the December 2009 edition of its Financial Stability Review, the ECB estimated potential losses for the euro area of 15% of capital, after considering the volume of existing provisions but excluding the ability to absorb losses through profits. In its October 2009 edition of the GFSR, the IMF estimated an impact of 35% for the United States and 23% for the euro area (also after taking into account the volume of provisions but not of profits). In the United States the stress test exercise (SCAP, Supervisory Capital Assessment Program) conducted in May 2009 put the volume of losses as a percentage of capital at 13% (although in this case existing provisions and projected future profits were included). It can be seen, in short, that the percentages vary significantly depending on the information, the assumptions and the relationships considered.

In order to evaluate the impact of the crisis on Spanish institutions and, in particular, on their potential additional capital needs, it is necessary to estimate doubtful assets and probabilities of default and compare them with existing loan loss provisions and current and future income. Alternatively, it is possible to evaluate the resilience of the Spanish banking system at aggregate level by comparing the range of losses estimated in the various exercises conducted internationally with the funds available for the bank restructuring process in Spain. The FROB (Fund for the Orderly Restructuring of Banks) envisages, if necessary, making available up to €99 bn of capital to inject into troubled institutions, equivalent to 46% of the own funds existing as at December 2009. This figure amply covers the worst-case scenario for losses considered internationally as mentioned in the previous paragraph. Furthermore, the worst-case scenario did not take into account the existence of profits to cushion part of the amount of the potential losses.

SOLVENCY
Deposit institutions

CHART 2.10



SOURCE: Banco de España.

Comparison of the biggest Spanish banks' income with that of their international peers holds up relatively well ...

On 2009 earnings, Spain's big banks recorded higher returns on total assets than their international peers (Chart 2.9.A). The lesser impact of the international financial crisis on Spain's large banks reflects their virtually zero exposure to the highly complex, non-transparent instruments that have put pressure on the income statements of most of the big European and US banks. Like their Spanish peers, these institutions are now facing a deterioration in the real economy, which will foreseeably continue to exert downward pressure on their income statements.⁷

...although their stock market performance since the start of the year has been relatively worse, due in part to uncertainty over the Spanish economy and the contagion effects of the Greek situation.

In terms of stock market performance, the large Spanish banks have outperformed their European peers since the international financial crisis intensified in September 2008. However, since the start of 2010 the tables have turned, with the European banks outperforming the Spanish ones. This may be partly because the doubts about the severity of the economic crisis in Spain are taking toll on investors' perception of the large Spanish institutions, despite their high level of geographical diversification. The contagion effect of the difficulties in Greece, and the uncertainty generated in this respect, especially in February, is also behind this contrasting performance, which is consistent with that of the CDS spreads (Chart 2.5.A).

2.1.3 SOLVENCY

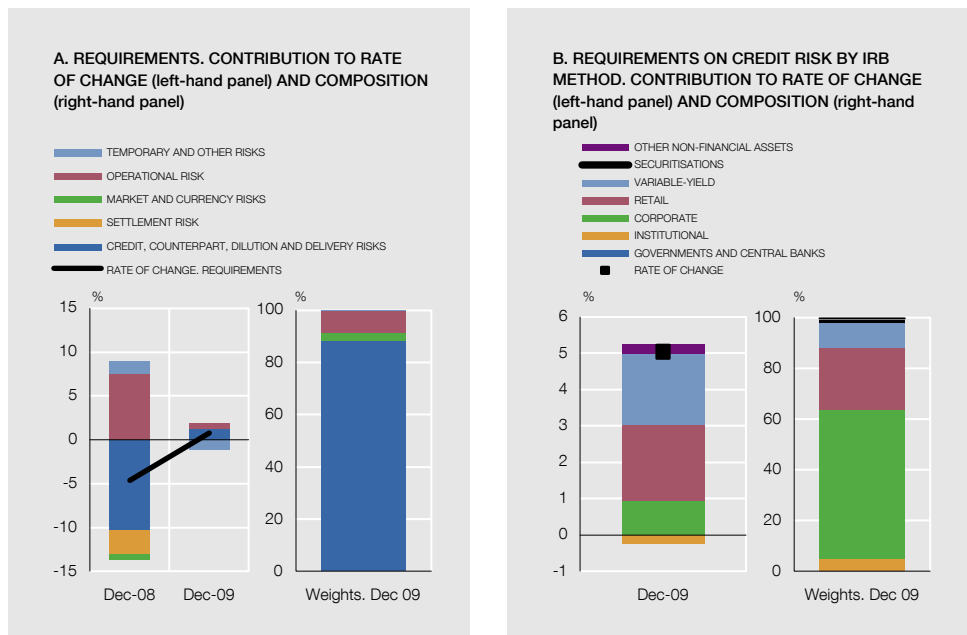
Spanish institutions substantially strengthened their solvency ratios...

As a whole Spanish deposit institutions ended 2009 showing stronger own funds. The solvency ratio stood comfortably above 8%, the regulatory minimum requirement. Thus, the total solvency ratio was 12.2%, almost 1 pp above that at end-2008⁸ (Chart 2.10.A).

... and, especially, tier 1 and core capital, which include top quality capital.

The strengthening of Spanish institutions' solvency has been particularly robust in terms of their top quality own funds. For instance, the tier 1 ratio increased 1.3 pp to 9.7%, while the core

⁷ The potential losses facing the different banking systems as a consequence of the international economic and financial crisis, and their ability to meet these losses, have been studied and estimated by numerous international organisations and analysts in recent years. Box 2.5 addresses this question. ⁸ The data for December 2008 and December 2009 were calculated according to Banco de España Circular CBE 3/2008, which transposes into Spanish law the EU Directives including the changes introduced by Basel II on solvency regulations.



SOURCE: Banco de España.

capital ratio, which measures the weight of top quality tier 1 capital (capital and reserves net of goodwill) in risk weighted assets, also rose by almost 1 pp from 7.1% to 8.1%. The disaggregated analysis shows that solvency increased for a high number of institutions (Chart 2.10.B).

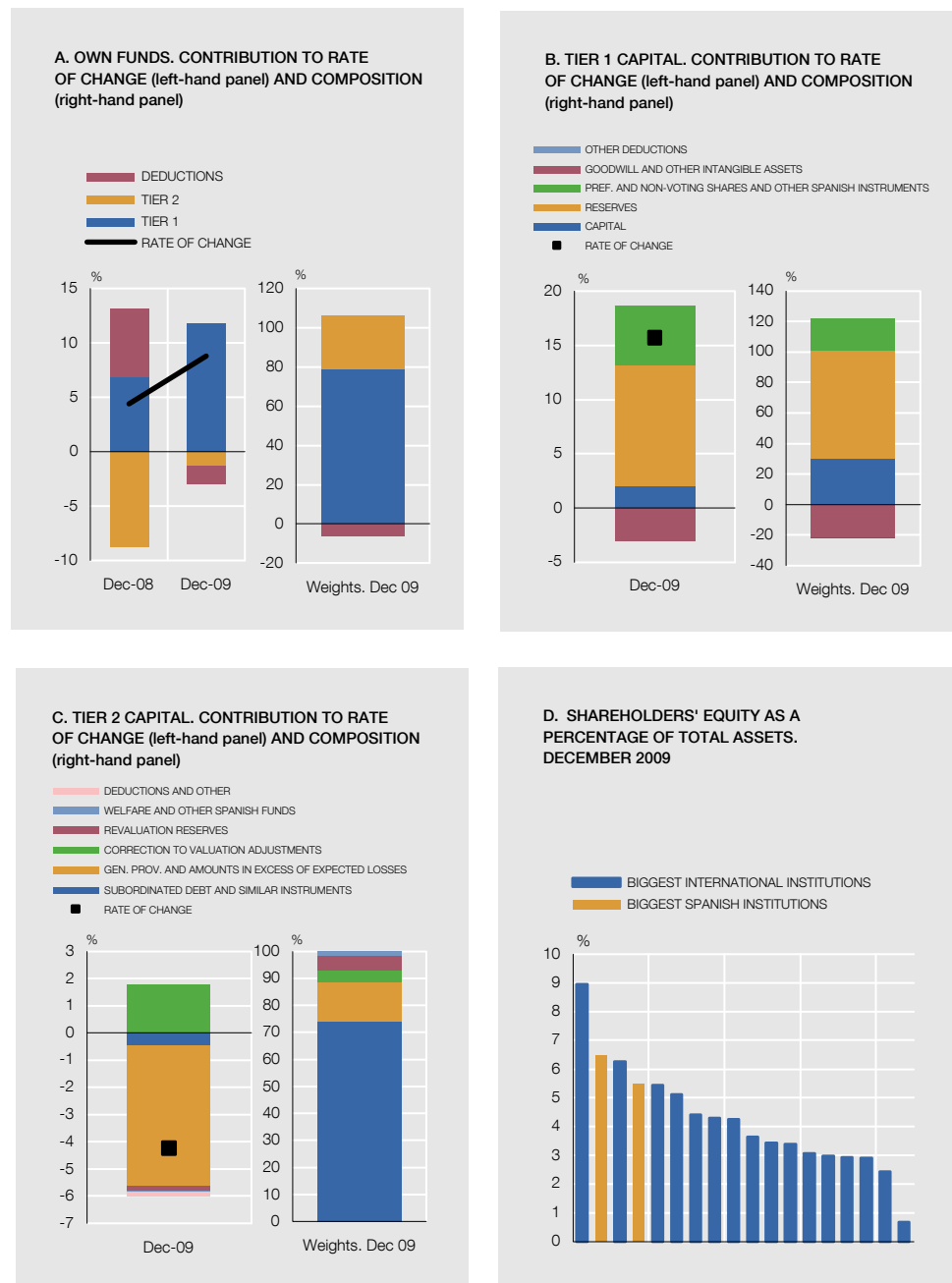
Such a significant strengthening of the tier 1 ratio and, in particular, of the more demanding core capital ratio reflects the efforts made by Spanish deposit institutions to increase their resilience in the current difficult climate. Further and equally important, it places institutions in a favourable position for undertaking the highly demanding changes which the Basel Committee on Banking Supervision is introducing in its stricter definition of capital and tighter requirements for the capital that financial institutions must hold in future (see Chapter 3).

The above-mentioned changes in solvency were due to a slight decline in risk weighted assets and, especially, a notable increase in own funds.

This is explained by a slight reduction in requirements...

Risk weighted assets, the denominator in the calculation of the solvency ratio, fell by 0.2% in December 2009, as a result of the restraint in lending (Chart 2.11.A). Thus, credit risk requirements, by far those with the greatest weight, stagnated and grew 36 bp, following the notable slowdown in December 2008 (-10.7%). Among the other requirements, only those for operational risk grew (8.5%), while those for market risk fell 3.1%.

Credit risk requirements performed very differently on the basis of whether the standardised or the IRB approach was followed by credit institutions in their calculations. Thus, whereas the requirements obtained from using the standardised approach, whose weight in total requirements was 63.5% at end-2009, decreased 2.1%, the risk requirements under the IRB method increased by 5%. The growth of requirements for the retail portfolio (8.9%) – comprising loans to individuals and SMEs, against a background of deteriorating economic activity – and for equity securities (22.6%), following a year of recovery for stock markets, were the main factors explaining the changes in requirements according to the IRB method (Chart 2.11.B).



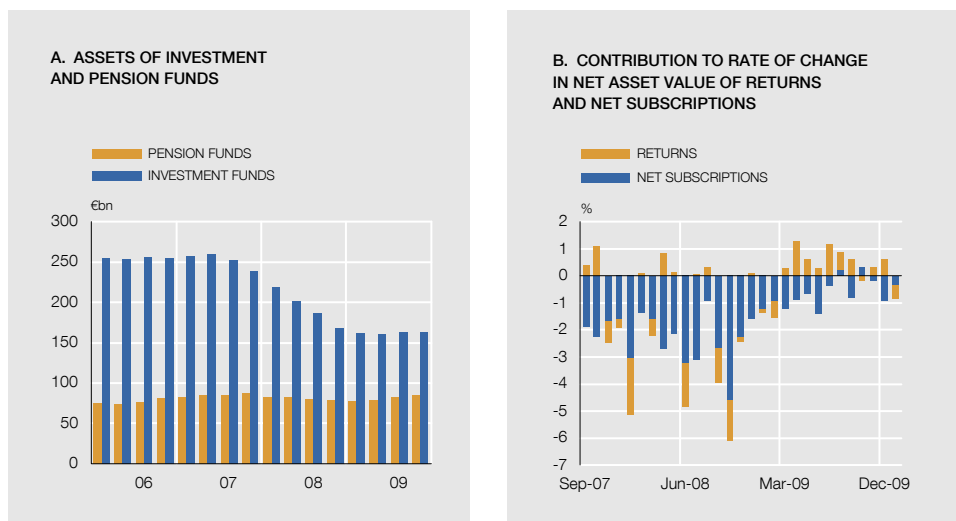
SOURCES: company reports and Banco de España.

... but especially by the strong growth of own funds,...

The growth rate of total own funds (the numerator of the solvency ratio) quickened to 8.3%, slightly more than double the rate in December 2008 (4%). The strong increase in tier 1 capital (15.5%, 6.4 pp higher than a year earlier) counterbalanced a further, albeit smaller, fall in tier 2 capital (-5.3%, in comparison with -21.6% in 2008) and the rise in deductions (32%) (Chart 2.12.A).

...mainly top quality own funds.

Growth of tier 1 capital accelerated due to the sound performance of all its positive components and in spite of the increase in goodwill (13.5%), arising from recent acquisitions (Chart 2.12.B). In particular, Spanish institutions strengthened their own funds by issuing



SOURCES: INVERCO and Banco de España.

preference shares (which grew 28.3%, representing a quickening of around 10 pp) and, mainly, by substantially increasing reserves (15.6%) and, to a lesser degree, capital (6.4%).

The drop in tier 2 capital eased as a result of a smaller decline in almost all of its components and, in particular, of general provisions (Chart 2.12.C). The rise in doubtful loans triggered an increase in specific provisions. In turn, this prompted a fall in general provisions negatively impacting eligible provisions.

Spanish institutions compare favourably with European banks in terms of own funds to assets.

As mentioned above, Spanish deposit institutions substantially strengthened their solvency ratios and, in particular, tier 1 capital. The international financial crisis has underlined how institutions with high solvency ratios have required quite strong intervention by public authorities. Aside from other considerations, this reflects that the risk associated with certain assets, in particular some of which are in the trading book and include a high credit risk, had not been sufficiently covered. Similarly, it shows the high leverage levels (measured as the inverse of the ratio of own funds, capital and reserves, to total non-weighted assets) which, in many cases, are precisely seen at institutions with higher regulatory capital ratios and larger trading books. The work of the Basel Committee on Banking Supervision (see Chapter 3) aims to remedy these and other deficiencies. In any event, if the own funds to total assets ratios (the inverse of the leverage ratio) of the largest Spanish institutions is compared with those of other European banks, the former are in a relatively advantageous position (Chart 2.12.D).

2.2 Insurance companies, investment funds and pension funds

The Spanish insurance sector must face the adverse economic situation...

The European insurance sector, whose profits and solvency, have come under downward pressure due to the international financial and economic crisis, currently faces different risks. The most striking of these risks is probably the financial risk, in so far as stock markets may still experience difficulties and interest rates may remain at low levels. A further risk stems from the economic situation, which puts downward pressure on business volume, and upward pressure on the number of claims, particularly in the industrial segments.

The Spanish insurance sector must also face the adverse economic situation, although the financial risks affect it to a lesser degree and, in particular, the situation of the real estate and stock markets. This is explained, as already indicated in previous FSRs, by the balance sheet structure that is characteristic of insurance companies in Spain, in which exposure to real estate and equity securities is relatively low.

... which is concentrated on weak growth in premium volumes, in particular in the non-life segment, although the aggregate solvency margin is above the required minimum.

The most recent available data and market information show a slowdown in the volume of premiums recorded in 2009 in comparison with 2008. While the year-on-year increase in the volume of premiums in the life segment is estimated to be around 5.8%, bolstered by savings products, negative rates of change are projected in the non-life segment (around -2.6%). The unfavourable business performance of the non-life segment is associated with multirisk home insurance, which is linked to a large extent to housing loans, and especially with the year-on-year decline in premiums in the automobile segment (-5.4%), whose weight in the total premiums of the non-life segment is around 40%, and with the performance of insurance for SMEs. In any event, available market data for the insurance sector as a whole indicate that the solvency margins for the life and non-life segments are relatively high, above the minimum level required.

A recovery was seen in investment funds' assets and, in particular, in net subscriptions.

Following a strong reduction in the assets managed by Spanish investment funds as a result of the international financial market crisis and, probably, the impact of increased competition for savings from credit institutions, these assets stabilised in the closing months of 2009 (Chart 2.13.A). Favourable contributions to this were the slight improvement in returns, but mainly the lower rate of decline in net subscriptions, which even posted positive values (namely, the funds contributed exceeded the funds withdrawn) in some months of 2009 (Chart 2.13.B).

3 Other issues

Since the international financial crisis began, different measures have been taken by public authorities on two different fronts: on the one hand, those aimed at softening the impact of the financial crisis in the short term and, on the other, those targeting reform of many areas of international financial regulation. This chapter analyses these two issues, firstly, by reviewing recent developments in and the current status of the exceptional measures adopted by governments and central banks. Secondly, the changes proposed by the Basel Committee on Banking Supervision (BCBS), which will have a significant impact for financial institutions worldwide, will be examined.

In the United States the gradual withdrawal of some extraordinary support measures, introduced to alleviate the effects of the financial crisis, has begun...

As for extraordinary unconventional measures, in the United States financial sector support initiatives reached a significant volume, although recently some of them have been withdrawn. From mid-2009 certain measures were gradually wound down; for example, guarantees for bank debt issues which ended definitively in October of that year. Furthermore, institutions began to return capital injections as they obtained own funds from the markets. However, some important programmes still remain in force, for example, the mortgage modification and refinancing programme, the programme for recapitalisation of the Federal mortgage securitisation agencies and the capital injection into AIG. As for asset purchases, the projected volume of asset-backed securities and government bonds were acquired and it does not seem likely that the authorities will sell these portfolios imminently which entails, among other things, the Federal Reserve maintaining a bloated balance sheet. Lastly, new actions have been proposed which, unlike the previous ones, target more specific segments.

as has occurred in the United Kingdom, although in this case support for larger institutions has continued.

In the United Kingdom, the amount of aid (in the form of capital injections and guarantees) soon reached high ratios in relation to GDP (Charts 3.1.A and 3.1.B). As a result of the improvement in financial markets, some of the measures aimed at the financial sector as a whole were used less frequently, however, guarantees and capital support for specific large institutions were maintained and even increased, signifying that there has been no decrease in their size overall. During the last six months, there have been no signs that liquidity support channelled through the Bank of England will be exhausted.

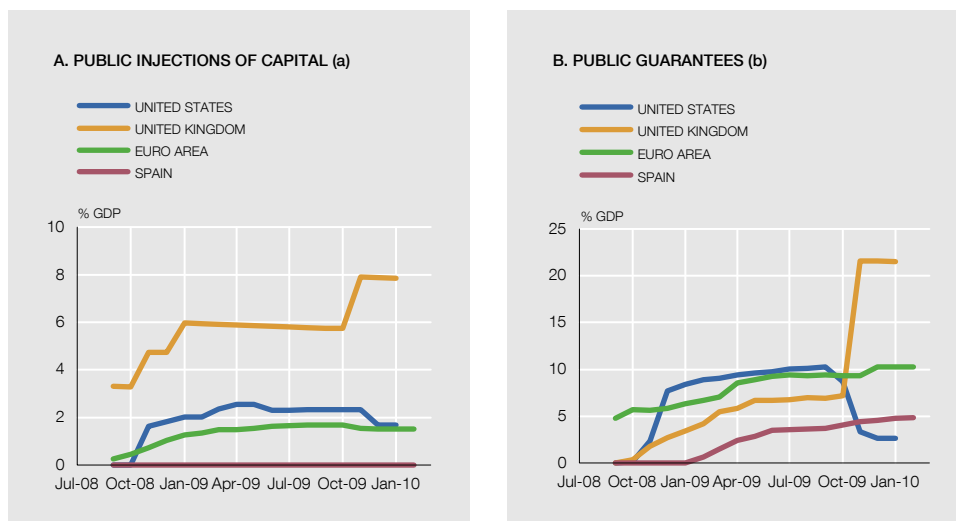
The Eurosystem has also withdrawn some measures, but full allotment of liquidity will continue as long as deemed necessary.

In the euro area, the improvement in financial markets prompted a slight reduction in the Eurosystem's balance sheet and enabled the ECB to announce in December that it would begin to withdraw unconventional measures. To date this has been achieved through the elimination of 12-month and six-month tenders, as well as the supplementary three-month tenders. Nevertheless, the ECB's main refinancing operations with full allotment of liquidity will continue as long as is needed, and at least until 12 October 2010. Also, to date covered bond purchases amounting to €41 bn have been made, as part of the Eurosystem's €60 bn programme ending mid-2010.

The use of state guarantees for the issuance of securities by banks was very uneven across countries and peaked at 10% of GDP around July 2009. This ratio stabilised subsequently. Unless new extensions are requested, several guarantee programmes will expire in June 2010. Injections of public capital in euro area countries also varied; these have slowed recently and the programmes in some countries have even ended. Furthermore, several large banks began to return the funds early.

In Spain the use of guarantees is gradually

In Spain the programme involving the purchase of top quality assets (the Fund for the Acquisition of Financial Assets - FAAF) was no longer in use from the beginning of 2009, and



SOURCE: Banco de España.

a. United States: includes capital injections under the various TARP programs and the recapitalisation of the mortgage securitisation agencies. United Kingdom: includes the recapitalisation of RBS and Lloyds-HBOS along with deposit insurance scheme financing measures for the institutions brought under State control.

b. United States: includes programs for temporary liquidity guarantees (TLGP) and for guarantees on the assets of specific banks (AGP). United Kingdom: includes the credit guarantee scheme (CGS) and the asset purchase scheme (APS). In the euro area, guarantees include both those for debt issued by financial institutions and guarantees for assets in bank and bank subsidiary balance sheets.

becoming less intense and, to date, there have been no injections of public capital.

further operations are not envisaged. As in the other areas analysed, guarantees for banks' fixed-income security issues gradually decreased. In principle, guaranteed issues with maturity up to five years may be made until 30 June 2010. Lastly, there have been no injections of public capital to date in Spain, although within the framework of the Fund for the Orderly Restructuring of Banks (FROB), institutions which merge may, under certain conditions, request this type of support from the FROB, until June of this year.¹

The withdrawal of measures is at present one of the most difficult economic policy decisions globally.

In conclusion, in the international arena a process has begun to withdraw or temper some financial system support measures, in a setting in which, if continued, they could foreseeably have negative effects on competition and the efficiency of financial systems. In any event, the withdrawal of these exceptional measures is a very difficult economic policy decision.

The BCBS is working intensively on matters related to the prudential supervision of...

Throughout 2009 the BCBS worked intensively and published rules, guides and consultative documents to combat the shortcomings related to the regulation, supervision and risk management of banks brought to light by the financial crisis, thus responding to the call made by the G-20.

... capital ...

In July 2009 the BCBS published the first raft of measures to strengthen the capital accord (see the previous FSR in this regard). However, the most important changes proposed due to their strong ramifications for financial institutions are those included in two documents published in December 2009,² which refer to the areas of capital and liquidity. In the sphere of capital they cover the following:

¹ In the context of the restructuring process of the Spanish banking system, Institutional Protection Schemes are being hotly debated (see Box 3.1). ² *Strengthening the Resilience of the Banking Sector, and International Framework for Liquidity Risk Measurement, Standards and Monitoring.*

1. Raising the quality, consistency and transparency of the capital base, defining and tightening the compulsory criteria for top quality capital.
2. Enhancing risk coverage. Among others, capital requirements for counterparty credit risk are strengthened and the incentives are increased so that OTC derivative exposures are cleared at central counterparties.
3. Introducing a leverage ratio as a supplementary measure to the Basel II solvency ratio.
4. Introducing a series of measures to reduce procyclicality. It is proposed that institutions have a capital buffer built up with a charge to retained earnings that can be drawn upon in periods of stress. Furthermore, the creation of an additional countercyclical buffer is being designed, to be provisioned solely at times of excessive credit growth. Lastly, it is proposed that provisions are made on the basis of expected losses (see Box 2.4).

... and liquidity.

As for liquidity risk, the second document proposes a quantitative framework for the measurement and coverage of liquidity risk in the form of two standards and a set of quantitative supervisory tools to monitor this risk. The standards included in this document are as follows:

1. Liquidity Coverage Ratio. Its objective is that banks hold highly liquid assets to cover their liquidity needs in a stress scenario during a one-month survival period. The document deems that cash and government debt securities are "highly liquid assets", although this question still remains open. The liquidity needs to be covered are defined as 100% of the net cash flow under a common predetermined stress scenario.
2. Net Stable Funding Ratio. It is more structural and its objective is to cover institutions' liquidity needs using stable sources of financing with the basic aim of preventing short-term funding of long-term assets.

Aside from the impact studies under way, the magnitude of the reforms will have a marked effect on financial institutions.

During 2010 H1 the impact of the proposals on institutions, markets and financial stability will be studied which, together with the industry's comments on the consultative documents, will be used to decide on the definitive design of the measures and how they will be gauged. The raft of measures will be defined by the end of 2010 and will be introduced gradually with the objective of them being applied by the end of 2012. In any event, and as discussed above, the full package of reforms proposed by the BCBS will foreseeably have a substantial impact on international financial institutions.

INSTITUTIONAL PROTECTION SCHEMES (IPSS)

BOX 3.1

Article 80 of the Capital Requirements Directive makes the first reference to IPSSs, defining these systems as "a contractual or statutory liability arrangement which protects those institutions and in particular ensures their liquidity and solvency to avoid bankruptcy in case it becomes necessary".

The Banco de España Solvency Circular 3/2008 is the last stage in the process of transposing the Directive into Spanish law, which naturally involved the amendment of Law 13/1985 and the enactment of Royal

Decree 216/2008. A reference to IPSSs is also included in the preamble to Royal Decree 9/2009 on the Fund for the Orderly Restructuring of Banks.

Under the Law, Royal Decree and Directive, it is possible to assign a 0% risk weighting to exposures to counterparties which are part of the lender's IPS.

It should be clarified, nonetheless, that the Directive was promoted by certain European groups (of savings banks and cooperatives) whose

structure was not based on a parent-subsidiary relationship. Thus, the Directive did not create IPSs, but merely regulated the status of a set of associations which had already been safeguarding their members' solvency and liquidity and which, thereafter, were able to release capital.

For an IPS to exist, there must be a "contractual or statutory liability arrangement", that is, a solidarity arrangement whereby the members of a group undertake to support each other, in terms of liquidity and solvency, if necessary.

In view of the scope, nature, depth and coverage of these solidarity arrangements, since there is no subsequent specific regulation, the varieties of IPSs are almost infinite. However, they can be classified into two main groups: 1) Narrowly defined IPSs, which are groups of institutions whose solidarity arrangements do not establish legally binding mutual support commitments. 2) Strengthened IPSs, which are groups of institutions whose solidarity arrangements define legally binding sound contractual commitments.

Strengthened IPSs are, therefore, a category above narrowly defined IPSs in so far as protection of their members is concerned, since the latter are de jure and the former are de facto systems. Moreover, a key feature of strengthened IPSs is a central body which combines cash management, product development and group strategic planning and results in a loss of members' autonomy. However, this central body is much less specific at narrowly defined IPSs.

The essential and immediate consequence of the differences described above is that, in most cases, strengthened IPSs are considered groups for regulatory purposes. Accordingly, supervision is conducted at group level, rather than individually as in the case of narrowly defined IPSs. Both kinds of IPSs may take advantage of 0% risk weighting between their members.

The Banco de España has resolved to establish a series of conditions, in addition to those already contemplated in the Circular 3/2008, to be met by IPSs in order for them to be considered strengthened and deemed to be groups for regulatory purposes. Accordingly it is essential that:

- 1) The commitment to joint and several solvency extends to at least 40% of each participating institution's eligible own funds.
- 2) There is a central, single management, body to monitor institutions' solvency and liquidity.
- 3) There is, within said body, professional and non-assembly-based single management, endowed with the appropriate resources.
- 4) This management is responsible for complying with the regulatory consolidated reporting requirements.
- 5) The system has the necessary devices for the monitoring and classification of risk.
- 6) There is a minimum term of ten years, with severe penalties to deter members from leaving the schemes.
- 7) Institutions mutualise at least 40% of their earnings, thereby sharing in joint business income.
- 8) The integration programme covers all the above aspects, together with significant events and a specific detailed implementation schedule.

In short, according to each specific case, IPSs may prove appropriate for certain institutions. In any case, in order to ensure that the resultant legal constructs may be considered groups for regulatory purposes, the Banco de España has strengthened the requirements in this respect.

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