Securities markets and their agents: situation and outlook

(*) This article has been prepared by the staff of the CNMV Research and Statistics Directorate.

Contents

Introduction

The growing importance of capital markets as a channel for saving and investment flows, plus their role in the generation and spread of financial turbulence, calls for a close and constant watch on their activities and participating agents in order to assess the state of play and the factors potentially shaping their future performance. This six-monthly report, inaugurated with the present issue, provides an overview of Spanish securities markets and their participants in the frame of the relevant international context. It also looks at the factors determining volumes and prices in principal trading venues, and the activity of intermediaries and investment vehicles. In general, this analysis will extend to the six months preceding the report's publication date, except for certain aspects relating to market operators, where the reference period will be the whole of the preceding year.

With this publication, the CNMV wishes to offer a systematic analysis of the general framework of its operations; convinced that the proper functioning of financial product markets depends on the availability of reliable and timely information, so sellers, buyers and intermediaries can arrive at an informed decision. Indeed, the existence of an adequate volume of public information underpins the three objectives legally assigned to the CNMV: the transparency of securities markets, efficient price formation and the protection of investor interests.

There is currently an abundance of studies and periodic reports examining the performance of the markets and the macroeconomic framework in which they operate. The *Report on securities markets and their agents: situation and outlook* does not seek to compete with such publications, but to add to them from a supervisory perspective. It will accordingly lend much of its attention to the implications of key macro-financial developments for issuers and other securities market participants, including investment service providers and the managers of investment vehicles.

The publication of this report is especially timely, coming just a few months after the crisis unleashed in the US mortgage market, which has caused serious disruption in financial markets. Many of the developments we describe have been heavily influenced by this period of turmoil. And future prospects are, in many cases, bound in with the length and the macro and financial fallout of the international crisis. Finally, our analysis would not be complete without detailed attention to the latest legislative novelties in Europe. These have brought substantial changes in the competitive framework of the national financial industry and, as such, pose significant challenges to market agents and infrastructure managers.

The report is organised as follows: the second section looks at national and international economic and financial developments; the third reviews the current situation of national equity and fixed-income markets; the fourth is devoted to market agents; and the fifth examines what are seen as the main novelties in European legislation and market infrastructures. Finally, the sixth section offers some conclusions.

1 Executive summary

- The crisis emanating from the US sub-prime mortgage market was among the factors dominating the progress of international and domestic financial markets over the last quarter of 2007 and opening months of 2008. As well as generating disruption episodes of varying intensity, the crisis prompted a revise-down of global macroeconomic expectations, provoking liquidity shortages in interbank and fixed-income markets and a re-pricing of financial instrument risk. Leading central banks responded with a string of cash injections, with many also switching over to a more expansionary monetary policy.

- Six months on from the start of the crisis, the market climate is still one of relative instability. The signs of interbank market normalisation are tentative at best, structured product markets are still having to cope with high spreads and sluggish issuance and trading activity, and equity prices have experienced a sharp run-down accompanied by heightened volatility.

- The recent turbulences have laid bare a series of shortcomings in market operation. Specifically, the recent episodes evidence a lack of transparency about the nature and intrinsic risks of some complex structured products and certain institutions' exposure to the vehicles worst hit by the sub-prime crisis. Rating agencies too have to shoulder some of the blame, and the discussions now underway in international forums about refining the legal framework for their activity must be regarded as a welcome advance.

- World macroeconomic conditions continued robust in 2007, and forecasts point to full-year growth rates verging on 5%. But the picture is changing. Projections for the next few quarters of 2008 augur a moderation of GDP growth in main geographical areas, due to the prolongation of financial market disruption, rising commodity prices and the downturn in the US real estate cycle. The main risks confronting the baseline economic and financial scenario for the world economy lie in the appearance of sizeable losses on listed company balance sheets, the persistence of tight liquidity in financial markets and a sharper-than-expected correction in domestic demand growth in main developed countries, as the availability of credit constricts.

- The macroeconomic scenario in Spain has been marked by the deceleration path initiated in mid 2007. One contributory factor was the slackening pace of domestic demand, particularly in construction and consumer spending. In general, the Spanish economy confronts the same risks as any other, with an appreciable exposure to real estate as its chief vulnerability factor. However it also enjoys a reserve of strengths, like the sound balance sheets of its financial institutions or its ample room for fiscal policy manoeuvre.

- Domestic financial markets traced a similar course to their international counterparts. In equities, financial turbulence triggered a price correction that cut deepest in the financial and real estate sectors. Trading volumes expanded strongly in 2007, before falling off slightly in the first quarter of

2008[1]. These movements were accompanied by an upswing in volatility, albeit from a baseline of historic lows. Spanish stock markets, which had enjoyed a bull run through 2007, commenced 2008 with significant price falls in line with European peers.

- The dominant notes on fixed-income markets have been the large rise in risk premiums, affecting even the highest quality issuers, from 20 basis points in August 2007 to more than 80 in the opening weeks of 2008[2], and the contraction of market liquidity extending to the instruments derived from the securitisation of bank loans. The result was an issuance stall in the last quarter of 2007 and the first of 2008, the exceptions being commercial paper[3] and asset-backed securities[4]. The latter are mainly being acquired by the original seller institutions, to stock up on liquid assets available for sale or for use as collateral in Eurosystem operations.

- The near-term performance of Spanish financial markets will hinge on the pace of normalisation of international financial activity and the macroeconomic impact of the recent turmoil. The main factors in Spain's favour are its continuing growth vigour despite the slowdown, and the financial strength of most corporate issuers – with little exposure to the assets worst hit by the international crisis. Conversely, its weak points are the uncertain prospects for the real estate sector and the high leverage of certain corporate players.

- For now, financial market operators are unlikely to suffer any serious dent in their business figures, although the pace will almost certainly slow. Most Spanish investment firms posted profits growth in 2007, and are sufficiently well cushioned financially to cope with a lull in market activity. However, all providers of investment services (investment firms and credit institutions) will have to tighten up their risk control systems in a frame of acute price volatility, as well as adapting to the strictures of the MiFID and to the more intense competition building in the industry over recent years.

- Liquidity problems on certain markets may make some instruments harder to value. Listed companies should therefore redouble their efforts at transparency and information quality, in line with international accounting standards, to ensure there is no discrepancy between their published financial statements and the underlying financial reality.

- The collective investment scheme (CIS) industry has only scant exposure – either directly or through holdings in foreign schemes – to instruments linked to US sub-prime mortgages. However, assets under management have traced a downward course since the first half of 2007 as a result of rising interest rates, which have lowered the returns earned on CIS holdings, and legislative changes that removed many of their tax advantages. The financial market

1 Turnover on the Spanish stock market moved up 44% in 2007 (see table 9). In the first quarter of 2008, it recorded an 8.4% decline in year-on-year terms.
2 Aggregate risk premium based on the five-year CDS of Spanish issuers.
3 Commercial paper issuance was €442,000 million in 2007 against the €334,000 million of 2006.
4 Asset-backed security issuance exceeded €141,600 million in 2007 vs. €91,600 million in 2006.

disruption of the closing months of 2007 only aggravated these trends, due to investors' heightened risk perception and, especially, a crowding-out effect as the banks engaged in a battle for deposits to cover their liquidity needs[5].

- The percentage of illiquid assets in CIS portfolios is reasonably low (a little over 6%). However, the decline in trading on some fixed-income markets means management companies must keep a close eye on portfolio liquidity and utilise suitable valuation benchmarks for instruments that can no longer count on a reliable market reference. Also, mounting competition from bank deposits means they must make doubly sure that the mechanisms to prevent conflicts of interest between managers and the bank groups many of them belong to are operating effectively.

- Regulatory changes are also high on the sectoral agenda. The biggest challenges derive from the implementation of the MiFID and recent initiatives in post-trade services that may affect the internal organisation and competitive framework of Spanish intermediaries and infrastructures. The goal, in the latter case, is to ensure the full integration of Spanish clearing and settlement facilities within the European system, and this may call for the removal of singularities that hinder interoperability with other countries.

2 Macro-financial conditions

2.1 International economic and financial developments

The US mortgage crisis causes successive waves of market turbulence....

Summer 2007 marked the start of a period of disruption on international financial markets with the detection of a large wave of defaults in the US sub-prime segment (of high-risk mortgages). The first signs of crisis were a sudden slump in the value of the securities backed by these loans and the resulting capital losses of the invested institutions. Next came a brusque revise-down of the ratings assigned to certain structured financial products, causing solvency difficulties among the monolines insuring their credit risk. These episodes shook agents' confidence in the information being given out on the credit quality of bank sector asset-backed securities, fuelling doubts about how deeply exposed each institution might be to the financial products worst hit by the turbulence. Among the immediate results were a major contraction in medium and long trades in non collateralised interbank markets, a large reduction in liquidity in structured product markets and other private fixed-income segments, and steeply rising credit spreads. Equity markets lasted out 2007 in fairly good form but suffered sharp corrections in the opening weeks of 2008 accompanied by an upswing in volatility.

... leading main central banks to adopt a more expansionary monetary stance, and to undertake a string of liquidity injections.

Leading central banks stepped in with a string of cash injections in interbank markets, and some switched to a more expansionary monetary stance for fear that financial instability might hold back economic growth. In particular, the US Federal

5 The combined assets of the collective investment industry closed the year 2007 at €255 billion, 5.7% less than in 2006.

Reserve has applied an additional three cuts in 2008, one of an extraordinary nature, leaving its funds rate at 2.25%[6]. The European Central Bank (ECB) has so far kept its main refinancing rate at 4%[7] with inflation creeping higher in recent months. However, the weakness betrayed by the latest euro area indicators has led the markets to discount a near-term easing move.

No signs yet of normalisation on interbank markets...

In forex markets, the US mortgage market debacle sent the dollar heading lower against main world currencies through 2007. This helped the Federal Reserve with its monetary expansiveness, but hindered the monetary policy execution of the economies most dependent on dollar imports. Also, financial market turbulence caused a re-pricing of the risk of financial instruments, which translated as the widespread unwinding of carry trades.

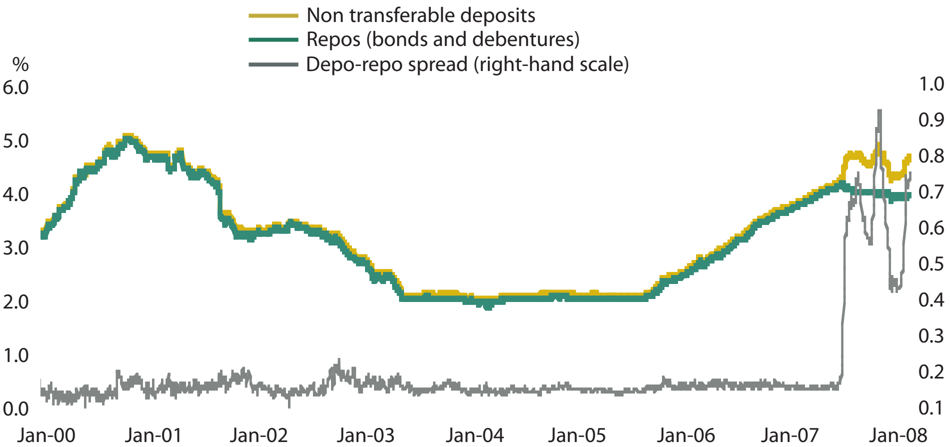
Financial markets have yet to show firm signs of normalisation. Hence the spread between the three-month rates of non transferable deposits and repos, which had eased to 40 basis points in February (see figure 1) from the highs of December 2007 (over 90 bp), rebounded sharply in March to over 70bp, significantly above its long-term average (below 10 bp). Turnover, meantime, staged a small recovery in the second half of March, with short instruments the most actively traded.

Meantime, structured product markets have continued sluggish, while the risk premiums of international bonds, as measured by various indicators (see figure 2), resumed an upward course in mid-October that has lifted them well above the levels of last August, coinciding with the start of crisis. For top-rated corporates, market turbulence has added around 130 bp to risk premiums in the US and 85 bp in Europe.

... while problems persist in structured product and international fixed-income markets, joined by high levels of stock market volatility.

Finally, stock markets followed up a fairly robust 2007 performance with a significant run-down in the first three months of 2008 (the more so in Europe). The other dominant note was the upswing in volatility, to the extent that the implied volatilities of main world bourses (especially in the United States) have reached levels unmatched since 2003 (see figure 3).

Interbank market in euros (3 month): interest rates FIGURE 1

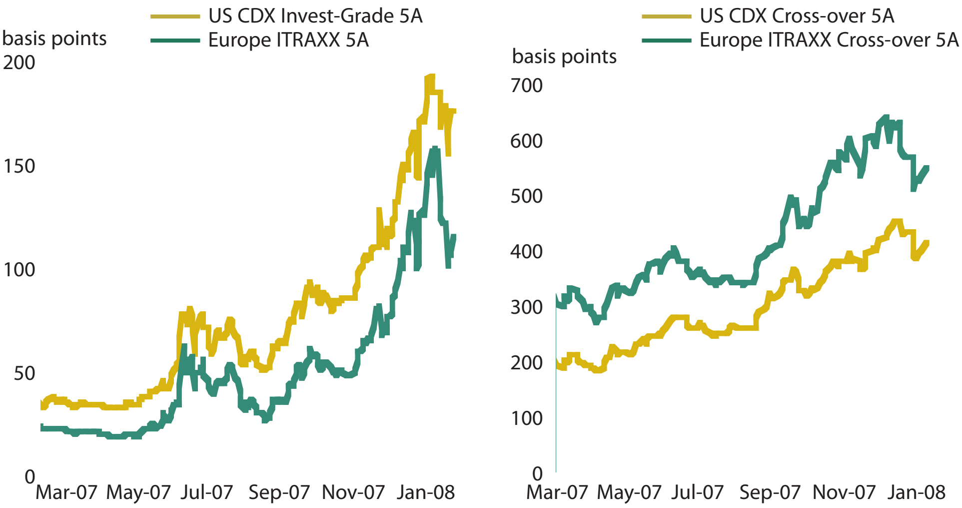


Source: Thomson Datastream. To 31 March.

6 The Federal Reserve agreed the following 2007 reductions in its official interest rates: from 5.25% to 4.75% on 18 September, from 4.75% to 4.5% on 31 October and from 4.5% to 4.25% on 11 December.
7 The ECB raised its rates on two occasions in 2007: from 3.5% to 3.75% on 14 March and from 3.75% to 4.0% on 13 June.

Credit risk indices

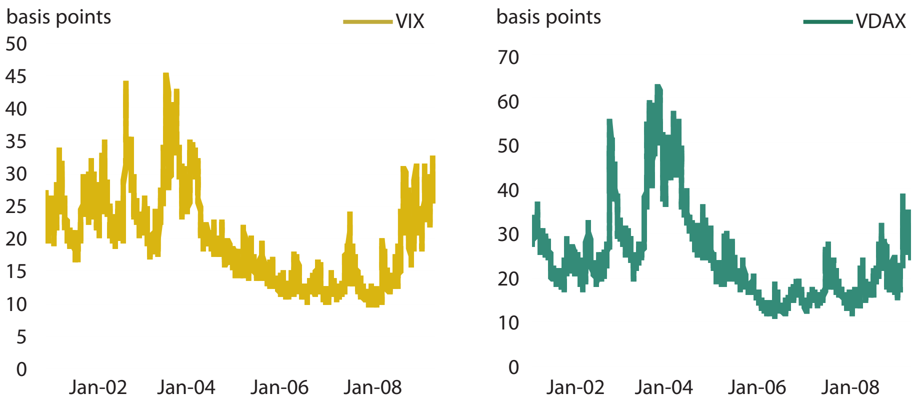
FIGURE 2



Source: Thomson Datastream. To 31 March.

Implied volatility

FIGURE 3



Source: Thomson Datastream. To 31 March.
VIX. Implied volatility of S&P 500 .
VDAX. Implied volatility of DAX.

World macroeconomic forecasts point to an appreciable growth slowdown in main economic areas...

World macroeconomic conditions continued robust in 2007, and forecasts point to full-year growth rates verging on 5%. But the picture is changing. Projections for the next few quarters of 2008 augur a moderation of GDP growth in main geographical areas due, among other factors, to the prolongation of financial market disruption. In particular, tougher borrowing conditions for households and companies could make serious inroads into domestic demand.

....with a significant degree of downside risk

This is not to say that the world economy will not stay reasonably vigorous for another year (see table 1), though the forecasts for some countries are highly uncertain, with estimate risk tilting to the downside. Of the risk factors for macroeconomic performance two loom largest: (i) a sharper than expected contraction of the US real estate market dragging the economy into recession and (ii) a prolonged liquidity shortage in world markets leading to a graver-than-expected credit constriction.

Gross Domestic Product (% annual change)

TABLE 1

	2004	2005	2006	2007	IMF(*) (**) 2008F	IMF(*) (**) 2009F	OECD(*) 2008F	OECD(*) 2009F
World	4.9	4.4	5.0	4.9	3.7 (-0.5)	3.8 (-0.5)	-	
United States	3.6	3.1	2.9	2.2	0.5 (-1.0)	0.6 (-1.2)	2.0 (-0.5)	2.2
Euro area	2.1	1.6	2.8	2.6	1.4 (-0.2)	1.2 (-0.7)	1.9 (-0.4)	2.0
Germany	1.1	0.8	2.9	2.5	1.4 (-0.1)	1.0 (-0.7)	1.8 (-0.4)	1.6
France	2.5	1.7	2.0	1.9	1.4 (-0.1)	1.2 (-1.0)	1.8 (-0.4)	2.0
Italy	1.5	0.6	1.8	1.5	0.3 (-0.5)	0.3 (-0.7)	1.3 (-0.4)	1.3
Spain	3.3	3.6	3.9	3.8	1.8 (-0.6)	1.7 (-0.8)	2.5 (-0.2)	2.4
United Kingdom	3.3	1.8	2.9	3.1	1.6 (-0.2)	1.6 (-0.8)	2.0 (-0.5)	2.4
Japan	2.7	1.9	2.4	2.1	1.4 (-0.1)	1.5 (-0.2)	1.6 (-0.5)	1.8
Emerging	7.5	7.1	7.8	7.9	6.7 (-0.2)	6.6 (-0.4)	-	-

Source: IMF and OECD.

(*) In brackets, percentage change versus the last published forecast. IMF, forecasts published April 2008 vs. January 2008. OECD, forecasts published December 2007 vs. June 2007.

(**)The national weightings used in January 2008 to calculate the aggregate growth of groups of countries were revised with respect to those presented in October in line with the new exchange rates used in the World Bank's PPP measure.

Performance of main stock market indices[1] (%)

TABLE 2

%	2005	2006	2007	I 07[2]	II 07[2]	III 07[2]	IV 07[2]	2008 (to 31 March) %/Dec	2008 (to 31 March) % annual
World									
MSCI World	7.6	18.0	7.1	2.1	5.8	1.9	-2.7	-9.5	-5.1
Euro area									
Euro Stoxx 50	21.3	15.1	6.8	1.5	7.4	-2.4	0.4	-17.5	-13.2
Euronext 100	23.2	18.8	3.4	3.1	7.4	-4.8	-2.0	-16.2	-16.0
Dax 30	27.1	22.0	22.3	4.9	15.8	-1.8	2.6	-19.0	-5.5
Cac 40	23.4	17.5	1.3	1.7	7.5	-5.6	-1.8	-16.2	-16.5
Mib 30	13.3	17.5	-6.5	0.3	1.3	-4.4	-3.7	-17.3	-22.9
Ibex 35	18.2	31.8	7.3	3.5	1.7	-2.1	4.2	-12.6	-9.4
United Kingdom									
FT 100	16.7	10.7	3.8	1.4	4.8	-2.1	-0.2	-11.7	-9.6
United States									
Dow Jones	-0.6	16.3	6.4	-0.9	8.5	3.6	-4.5	-7.6	-0.7
S&P 500	3.0	13.6	3.5	0.2	5.8	1.6	-3.8	-9.9	-6.9
Nasdaq-Cpte	1.4	9.5	9.8	0.3	7.5	3.8	-1.8	-14.1	-5.9
Japan									
Nikkei 225	40.2	6.9	-11.1	0.4	4.9	-7.5	-8.8	-18.2	-27.5
Topix	43.5	1.9	-12.2	1.9	3.6	-8.9	-8.7	-17.8	-29.2

Source: Datastream.
1 In local currency.
2 Change over previous quarter.
3 Year-on-year change to the reference date.

2.2 Economic and financial developments in Spain

The Spanish economy entered a deceleration path in mid 2007. One contributory factor was the more subdued pace of domestic demand, especially in construction and consumer spending. Rising inflation and interest rates, plus the swelling household indebtedness of recent years eroded the growth of disposable income, causing a slowdown in private consumption and housing investment. However economic growth exhibited a more balanced mix, with less dependence on domestic demand and an improved contribution from the net exports side. Slower growth also meant a slower pace of job creation, especially in branches

The Spanish economy is experiencing a growth slowdown and an upturn in inflation.

linked to the construction and real estate sectors. On the inflation front, rising processed food and energy prices helped drive the headline rate above 4%, restoring the differential vs. the euro area to more than one percentage point. General government accounts again closed the year with a comfortable surplus. Current forecasts suggest that the uncertainty prevailing on financial markets and tougher corporate borrowing conditions will accentuate the consumption and investment slowdown in 2008[8] (see table 3).

Spain: main macroeconomic variables (% annual change) TABLE 3

	2004	2005	2006	2007	European Commission 2008S	2008A	2009S	2009A
PIB	**3.3**	**3.6**	**3.9**	**3.8**	**3.4**	**3.0**	**--**	**2.3**
Private consumption	4.2	4.2	3.7	3.1	3.3	2.7	--	2.4
Government consumption	6.3	5.5	4.8	5.2	4.8	5.0	--	4.9
Gross Fixed Capital Formation, of which:	5.1	6.9	6.8	5.9	5.0	3.0	--	0.6
Equipment	5.1	9.2	10.4	11.6	7.7	5.9	--	5.8
Exports	4.2	2.6	5.1	5.3	5.4	4.7	--	4.6
Imports	9.6	7.7	8.3	6.6	7.0	5.2	--	4.2
Net exports (growth contribution, pp)	-1.6	-1.7	-1.2	-0.7	-0.9	-0.5	--	-0.1
Employment	2.6	3.1	3.1	3.0	2.5	2.1	--	1.7
Unemployment rate[1]	11.0	9.2	8.5	8.3	7.8	8.5	--	9.1
HICP	3.1	3.4	3.6	4.3	2.6	2.9	--	2.7
Current account (% GDP)	-5.9	-7.5	-8.8	-10.0	-9.7	-9.6	--	-9.8
General government (% GDP)	-0.3	1.0	1.8	2.2	1.2	1.2	--	0.6

Source: Ministry of Economy and Finance, National Statistics Office (INE) and European Commission.
S: Spring Report forecasts. A: Autumn Report forecasts.
1 Eurostat definition.

Spanish financial institutions start from a position of capital strength and above par profitability ratios...

In any case, Spanish financial institutions start from a sound financial position supported on high profitability ratios, strong capital adequacy and NPLs at historic lows. The Spanish mortgage market has no equivalent to the US sub-prime segment and loan-book quality is impressively solid. Also, their balance sheets are almost entirely free of assets linked to US sub-prime mortgages, and possible exposure via credit lines with other financial intermediaries invested in such products is on a negligible scale[10]. The liquidity shortages on the interbank market have caused less harm than in other countries, because most institutions have stocked up on funds in recent years through securitisation and medium- and long-term debt issues.

...as do a majority of Spanish non financial issuers. A small number are rather more vulnerable due to the build-up of debt.

Spanish non financial issuers also start from a comfortable position, endorsed by their high (though moderately contracting) profitability ratios. That said, some companies are considerably more exposed to adverse shocks by way of the large debt accumulated in the past few years, much of it going to finance corporate transactions.

The debt of non financial listed companies[10] stood at 1.6 times equity in full-year 2007. This was a little less than at end-2006 (1.7 times), but well above the ratios of the start of the decade (1.06 times in 2001). As we can see from table 4, the debt

8 Table 3 offers the growth forecasts published by the European Commission in spring and autumn 2007. More recent activity, price and employment indicators set the growth consensus closer to 2.5% than the 3.0% shown in the table.
9 See Banco de España Financial Stability Report, November 2007.
10 Measured as debt (bonds and other marketable securities plus bank finance) to equity.

run-up was especially pronounced in "construction and real estate", which accounted for over 47% of the total (against 10% at the start of the decade).

Despite this growth, interest expense on corporate debt has held at 33% of EBIT (earnings before interest and taxes) thanks to low interest rates, so the financial pressure weighing on the sector is still moderate in most cases. Also, the fact this debt has been arranged with relatively long maturities buffers firms from the worst effects of financial market turmoil[11].

The ratings assigned to Spanish companies also suggest a globally favourable outlook. These are generally high and recent reviews have concluded in upgrades in a majority of cases[12] .

On the investor side, the first point to note is the conservative bent of their portfolios; far more pronounced than in other developed economies and quite possibly accentuated in recent months. Specifically, figures for the first three quarters of 2007[13] show a mild contraction in the total assets acquired with respect to 2006, accompanied by portfolio reallocation towards low-risk financial instruments stronger on liquidity. Changes in the tax treatment of saving, effective from 1 January 2007[14], and the sustained rise in interest rates have enhanced the attractiveness of more liquid assets, bank deposits particularly, to the detriment of investment funds. Indeed, banks deposits accounted for almost three quarters of household asset acquisitions to September 2007[15]. Fixed-income investment (both public and private) also gained some ground from riskier alternatives, with stock markets increasingly in the grip of uncertainty.

The conservative bias of Spanish investors has been accentuated by the international mortgage and financial crisis, driving more of them into banks deposits……

11 Approximately 80% of the debt of non financial listed companies is classified as long term.
12 Of the 14 revisions of Spanish companies' long-term ratings effected since June 2007 (by Moody's, S&P or Fitch), eight were upgrades.
13 Banco de España financial accounts.
14 Taxation of savings has become more neutral across instruments, terms and income brackets: (i) the term "special income" has been replaced by "saving income", taking in all financial income regardless of the time over which it was generated, (ii) the same tax treatment is given to capital income and all other capital gains and losses. The standard 15% rate has been raised to 18%, whatever the income of the contributor. Withholding tax is also raised from 15% to 18%.
15 Banco de España financial accounts. Cumulative four-quarter data.

Gross debt by sector: listed companies

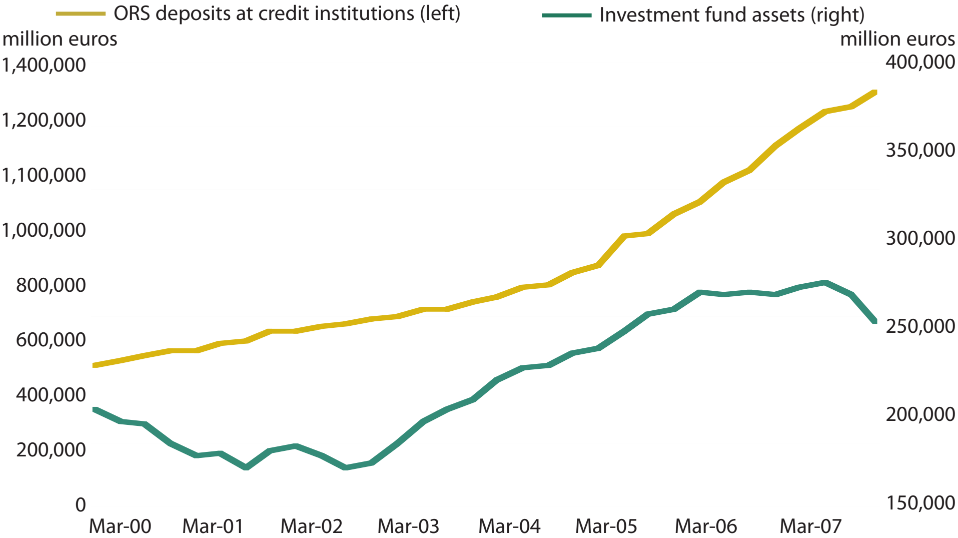
TABLE 4

Million euros		2003	2004	2005	2006	2007
Energy	Debt	54,159	54,776	58,586	59,191	69,172
	Debt/Equity	0.98	1.06	0.93	0.89	0.78
	Debt/EBITDA[1]	2.92	2.78	2.41	2.17	2.48
	Interest expenses /EBIT[2]	0.49	0.28	0.25	0.22	0.24
Construction and Real estate[3]	Debt	24,552	32,293	48,324	111,000	138,933
	Debt/Equity	1.59	1.93	2.16	3.10	3.08
	Debt/EBITDA	5.91	5.71	6.51	11.52	10.83
	Interest expenses /EBIT	0.30	0.35	0.36	0.49	0.85
Industry	Debt	10,507	10,397	12,760	15,684	13,312
	Debt/Equity	0.61	0.69	0.75	0.78	0.61
	Debt/EBITDA	1.98	1.91	2.07	2.07	1.82
	Interest expenses /EBIT	0.25	0.15	0.15	0.18	0.17
Services	Debt	34,956	44,505	55,710	91,522	90,785
	Debt/Equity	0.89	1.61	1.7	2.52	2.16
	Debt/EBITDA	2.08	2.58	2.68	3.58	2.94
	Interest expenses /EBIT	0.31	0.37	0.30	0.41	0.31
Adjustments[4]	Debt	-208	-5,566	-7,943	-11,199	-17,390
AGGREGATE TOTAL	**Debt**	**123,966**	**136,405**	**167,438**	**266,198**	**294,811**
	Debt/Equity	**1.01**	**1.26**	**1.27**	**1.71**	**1.57**
	Debt/EBITDA	**2.8**	**2.9**	**2.9**	**3.86**	**3.91**
	Interest expenses /EBIT	**0.38**	**0.30**	**0.26**	**0.30**	**0.33**

Source: CNMV.
1 Gross income.
2 Earnings before interest and taxes
3 Including the Gecina debt carried by Metrovacesa under "liabilities directly associated with non current assets designated as available for sale and interrupted activities"
4 In drawing up this table, we eliminated the debt of issuers consolidating accounts with some other Spanish listed group. The figures in the adjustments row correspond to eliminations from subsidiary companies with their parent in another sector.

Investment fund assets vs. bank deposits

FIGURE 4



Source: CNMV and Banco de España.
ORS: Other resident sector.

The latest data, for the fourth quarter of 2007, confirm the flat evolution of investment fund assets due to the large volume of net redemptions. Fund earnings, though less than in past years, would not seem to warrant this scale of withdrawals, which may have more to do with other factors like changes in the tax treatment of savings, rising interest rates (which favour bank deposits), the uncertainties engendered by the international mortgage and financial crises and, more recently, financial institutions competing for traditional liabilities to get round their funding difficulties on international markets (see section 4).

... to the detriment of investment funds, which last year suffered the largest outflows in a decade.

Investment fund subscriptions and redemptions (million euros) TABLE 5

Category	Subscriptions				Redemptions			
	Q107	Q207	Q307	Q407	Q107	Q207	Q307	Q407
Fixed income[1]	31,679	27,498	30,581	26,566	32,087	28,502	28,983	32,606
Balanced fxd income[2]	2,322	1,440	1,142	956	1,967	1,664	2,050	2,128
Balanced equity[3]	909	753	635	452	1,023	894	999	1,107
Spanish equity	1,985	992	483	943	1,750	1,861	1,429	1,683
Intern. equity[4]	5,519	4,925	3,215	2,971	4,987	4,011	5,242	5,834
Fxd-inc guaranteed	2,074	1,915	2,191	2,981	1,452	1,369	1,897	1,712
Equity guaranteed	1,800	1,858	1,316	3,096	2,785	2,238	2,142	4,437
Global funds	6,474	4,681	3,046	3,543	6,515	4,624	5,906	6,942
Hedge funds	47	29	32	243	0	0	0	2
Funds of hedge funds	9	614	233	215	0	2	11	53
TOTAL	**52,817**	**44,705**	**42,875**	**41,967**	**52,567**	**45,165**	**48,659**	**56,504**

Source: CNMV
1. Includes: Short-term, long-term and international fixed-income and money-market assets.
2. Includes: Balanced fixed income and balanced international fixed income.
3. Includes: Balanced equity and balanced international equity.
4. Includes: Euro, international Europe, international Japan, international US, international emerging market and other international equity.

2.3 Outlook

Some aspects of this latest episode of financial turmoil bear similarities to earlier crises (the stock market crash of 1987, the Russian default and the collapse of Long Term Capital Management in 1998, the bursting of the "dot.com" bubble in 2000 or the terrorist attacks of 2001). As before, the result has been a widespread increase in the perception and price of risk that has pushed up volatility on international financial markets and prompted a flight to quality among the investor public.

This period of turbulences, which has some points in common with earlier crises...

The main difference this time round is possibly the dearth of liquidity affecting certain wholesale markets, which as well as limiting the funding channels available to banks speaks implicitly of a general crisis of confidence. Uncertainties will in all probability continue to predominate until the impact of the sub-prime crisis on corporate finances is fully out in the open, which will not be until companies release their income statements for the first half of 2008. The main risks for the baseline financial and economic scenario reside in: (i) the reporting of heavy losses on listed company balance sheets, (ii) the persistence of tight liquidity in financial markets causing severe constrictions in household and commercial lending, and (iii) as a result of the above, a sharper-than-expected correction in domestic demand.

... and others unique to itself, will only conclude when agents get back their lost confidence.

The Spanish economy confronts the same general risks as other economies. Greater exposure to the real estate cycle is perhaps its most vulnerable flank. But it also has compensating strengths like the soundness of its financial institutions and the fiscal policy leeway provided by a sustained general government budget surplus.

The Spanish economy is exposed to general and specific risks, but also has significant reserves of strength.

3 Spanish markets

3.1 Stock markets

The Spanish stock market followed up the strong gains of 2007 with a sharp run-down in the first months of 2008....

Spanish equity prices have been moving erratically since the onset of the international mortgage and financial crisis. Despite escalating market volatility, the main benchmark index (Ibex-35) closed 2007 with a sturdy gain of 7.3%, outperforming other comparable markets. However, the first three months of 2008 brought a price slide of over 10% and a renewed upswing in volatility, coinciding with a spate of negative newsflow on world economic activity. The Spanish index fell rather less steeply than other European exchanges (see table 2).

... which hurt some companies worse than others.

This performance was by no means common to all listed firms by sector or size. On the first score, the most heavily penalised were those linked to real estate (that is, construction and, especially, real estate services) and credit institutions, because of their exposure to financial turbulence. Meantime, telecommunications firms appear to have taken on a safe-haven status. By size, the worst performers were the small and medium caps, whose bear run of 2007 was prolonged through the opening months of 2008, taking year-on-year losses to around 30% in both cases. Even the large cap firms making up the Ibex-35 performed unevenly. Weighting played an important role here, with as much as 85% of the index ' s 2007 price variation tracing to just two companies.

Falling prices have taken the Ibex-35 price-earnings ratio (P/E) to recent lows...

The decline of the Ibex-35 since November 2007 has lowered the price-earnings ratio (P/E[16]) to just under 12, substantially below the average of recent years (16 since 2000). This multiple aligns Spanish market prices more closely with those of European than North American companies, in a break with the pattern observable since 2005.

Performance of Spanish market indices (%) TABLE 6

	2004	2005	2006	2007	I 08 (to 31 March) %/Dec	I 08 (to 31 March) % y/y
Ibex-35	17.4	18.2	31.8	7.3	-13.3	-6.4
Madrid	18.7	20.6	34.5	5.6	-13.2	-8.6
Ibex Medium Cap	25.1	37.1	42.1	-10.4	-12.8	-26.9
Ibex Small Cap	22.4	42.5	54.4	-5.4	-11.5	-22.7
FTSE Latibex All-Share	31.0	83.9	23.8	57.8	-1.1	59.9
FTSE Latibex Top	28.1	77.9	18.2	33.7	0.2	35.4

Source: Thomson Datastream.

16 P/E is the ratio between the price of a share (or index) and its earnings per share on a given date. Earnings per share can be expressed on a trailing or a forward basis. This report uses historical data from Thomson Datastream.

Performance by sector of the Spanish stock market (%) TABLE 7

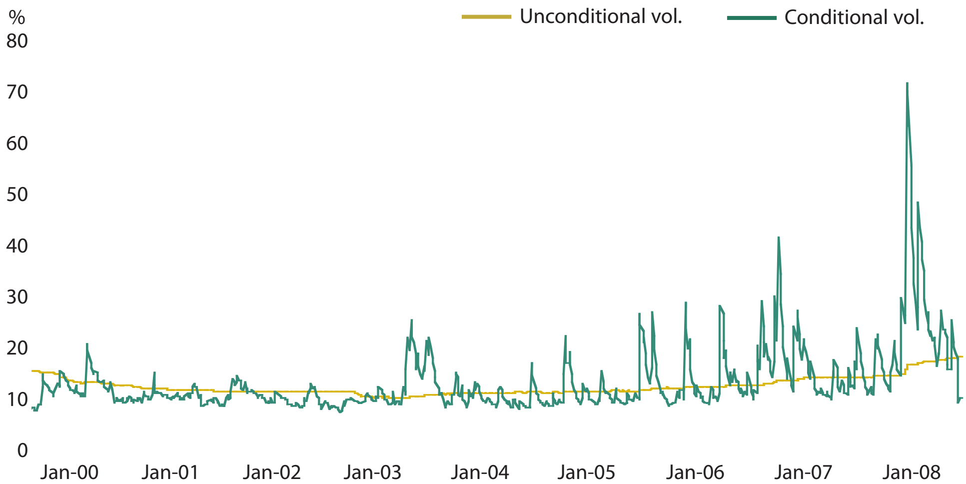
	2004	2005	2006	2007	I 08 (to 31 March) %/Dec	I 08 (to 31 March) % y/y
Steel	25.3	20.7	81.2	-17.5	-4.2	-12.0
Water	31.2	18.1	55.6	-0.8	2.8	11.2
Auto	0.6	21.8	171.1	0.0	-16.4	-25.7
Food and drink	1.3	10.4	14.6	10.8	-2.9	-0.7
Construction and construction materials	28.5	50.4	61.6	-12.0	-16.6	-28.4
Basic consumption	40.0	19.0	12.9	6.9	0.4	8.3
Discretionary consumption	33.7	24.8	21.2	-7.7	-17.0	-27.7
Electricity	19.6	32.9	46.1	16.9	-10.6	0.4
Financial companies	10.1	22.5	35.5	-10.5	-15.4	-25.3
Hotels	17.3	41.8	27.9	-25.0	-14.6	-44.2
Real estate	29.5	58.9	100.4	-42.6	-2.3	-42.8
Paper	30.2	13.7	36.6	-12.4	-15.4	-31.5
Chemicals	19.2	176.1	-20.4	-58.4	-3.5	-59.8
Tobacco	49.8	13.7	5.0	21.5	0.1	24.9
Telecommunications and media	16.7	-0.7	29.4	26.3	-13.2	8.5
Utilities	21.5	27.2	42.0	18.5	-8.9	3.9

Source: Thomson Datastream. Monthly data.

Another trend was the significant widening of the earnings yield gap[17] from its pre-crisis levels of last summer, with falling share prices post-crisis coinciding with a decline in long-term interest rates. This widening movement, though accompanied by some volatility, took the gap to a March level of 4.5% against a historical average since 1999 in the neighbourhood of 2%.

... and caused a widening of the earnings yield gap.

Historical volatility: Ibex-35 FIGURE 5

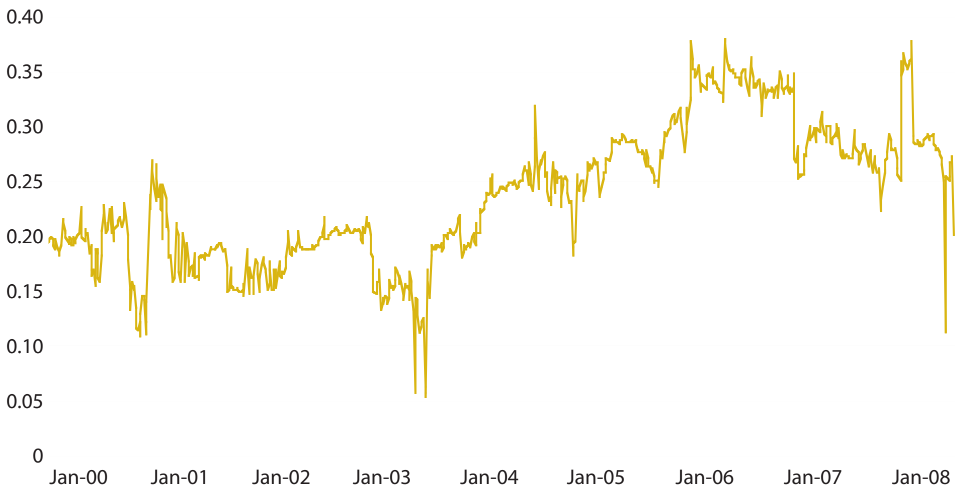


Source: Datastream and authors. Data to 31 March.

17 The earnings yield gap reflects the return premium required to be invested in an asset carrying higher market risk than public debt. It assumes that the price of a share at any given moment is the present value of the future cashflows its ownership gives rise to. The cashflow discount factor will include the said premium. Its value can be expressed as: $\rho = \frac{1}{PER} - r$, in which P/E is the price earnings ratio and r the interest rate of long-term government bonds.

Asymmetry of Ibex-35 volatility

FIGURE 6



Source: Datastream and authors. Data to 31 March. The parameter represented uses an asymmetric GARCH model(*) to measure the sensitivity of conditional volatility to downside surprises.
(*) The specific equation is: $\ln(P_t / P_{t-1}) = \alpha + \varepsilon_t$,
with variance: $\sigma_t^2 = \omega + \theta \cdot \varepsilon_{t-1}^2 + \beta \cdot \sigma_{t-1}^2 + \eta \cdot \varepsilon_{t-1}^2 \cdot [1 \Leftrightarrow \varepsilon_{t-1} < 0] + u_t$

Arithmetical average of the correlation coefficients of Ibex-35 shares

FIGURE 7

Source: Datastream and authors. Data to 31 March.

Market uncertainty translates as greater volatility and an increased sensitivity to index falls...

Market uncertainty drove the index's historical volatility to beyond its 2002 highs in January, though with some degree of easing in the next two months (figure 5). The growth in the distribution asymmetry of daily Ibex-35 variations is significant here, since it means that price variability is becoming increasingly sensitive to downward movements in the index. This parameter has reduced slightly since its summer peak but continues at high levels (figure 6).

...which stand as the principal risk factors, along with a rising correlation between asset returns.

The growing correlation between different asset returns is a possible vulnerability factor for domestic financial markets. The returns of Spanish equity are now strongly correlated with those of other financial assets, notably European equity where the coefficient has been topping 80% for the last six months. The correlation among Ibex-35 shares has also been trending higher (to upwards of 45%). This suggests there are common factors driving the performance of equity securities as a whole, possibly to do with economic globalisation and the greater liquidity of listed shares versus private fixed-income instruments at a time when investors are especially concerned about the depth of financial markets. In effect, an analysis of the pertinent measures (bid-ask spread, Kyle's lambda) shows that domestic equity markets remain strongly liquid.

Equity issuance expands despite the year's unsettled climate, thanks to the large number of capital increases.

Although the unsettled markets of the second half may have slowed the pace of equity issuance, full-year volumes were significantly up versus 2006 (almost five times higher) and 2005 (table 8). This increase is entirely a result of capital increases, since public share offerings were actually fewer than in 2006.

Equity issues and public offerings[1] TABLE 8

million euros	2004	2005	2006	2007	2007: I 07	II 07	III 07	IV 07	2008: I-08
CASH AMOUNTS[2]	**21,735.6**	**2,960.5**	**5,021.7**	**23,757.9**	**803.9**	**11,218.1**	**4,337.2**	**7,398.7**	**9.5**
Capital increases	18,748.0	2,803.4	2,562.9	21,689.5	696.1	9,896.5	4,273.8	6,823.1	0.0
Of which, rights offerings	1,101.9	0.0	644.9	8,502.7	0.0	334.2	3,485.2	4,683.3	0.0
Domestic tranche	537.9	0.0	303.0	4,821.4	0.0	334.2	2,449.6	2,037.6	0.0
International tranche	564.0	0.0	342.0	3,681.4	0.0	0.0	1,035.6	2,645.8	0.0
Public offerings	2,987.6	157.1	2,458.8	2,068.5	107.8	1,321.6	63.4	575.6	9.5
Domestic tranche	1,664.4	54.7	1,568.1	1,517.1	107.8	913.5	63.4	432.4	9.5
International tranche	1,323.2	102.5	890.7	551.4	0.0	408.1	0.0	143.3	0.0
NUMBER OF FILINGS[3]	**42**	**27**	**30**	**35**	**7**	**10**	**6**	**12**	**1**
Capital increases	37	25	21	26	6	8	5	7	0
Of which, rights offerings	4	0	8	8	0	2	2	4	0
Of which, bonus issues	15	6	0	0	0	0	0	0	0
Public offerings	7	2	14	12	1	3	1	7	1

Source: CNMV.
1 Issues filed with the CNMV. Initial and supplemental filings.
2 Excluding amounts recorded in respect of cancelled transactions.
3 Including all transactions registered, whether or not they eventually went ahead.

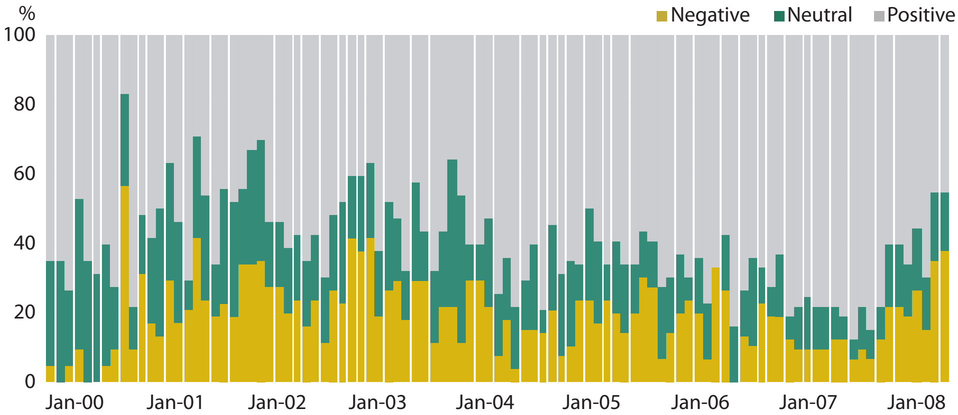
The main risks for equity markets lie with not knowing the true impact of the international mortgage crisis or the scale of economic slowdown.

Although the key factors for equity market performance remain generally supportive, with company earnings expected to stand up strongly, uncertainties are being stoked from two directions: (i) the fact no one is sure how the international mortgage and financial crisis will affect corporate balance sheets, and (ii) the risk for economic and employment growth in the economy as a whole, which right now is tilted to the downside. As we write, the combination of lower-than-projected corporate earnings for 2007 and US macroeconomic variables worse than the consensus view stands as the main risk scenario for world stock markets.

Turnover in the Spanish stock market									TABLE 9
Million euros	2004	2005	2006	2007	Mar 07	Jun 07	Sep 07	Dec 07	Mar-08
All exchanges	**642,109**	**854,145**	**1,154,294**	**1,667,219**	**418,540**	**441,725**	**372,131**	**434,823**	**383,254**
Electronic market	636,527	847,664	1,146,390	1,658,019	415,857	439,664	370,417	432,081	380,935
Open outcry	5,194	5,899	5,318	1,155	574	209	98	274	44
Of which SICAVs[1]	4,541	4,864	3,980	362	258	57	32	15	3
MAB[2]	-	-	1,814	6,985	1,771	1,605	1,369	2,240	1,966
Second Market	21	26	49	194	122	22	38	12	3
Latibex	366	557	723	868	217	226	209	216	306

Source: CNMV.
1 Open-end investment companies.
2 Alternative stock market. Data since the start of trading on 29 May 2006.

Revisions of earnings forecasts. IBES FIGURE 8



Source: Datastream and authors. Data to 31 March.

3.2 Fixed-income markets

Spanish fixed-income markets, like those elsewhere, are witnessing a flight to quality, as evidenced by a decline in long-term bond yields...

Spanish government bond markets reacted to the crisis in much the same way as other international sovereign markets. Mounting investor uncertainty in the wake of the mortgage and financial turbulence prompted a flight to quality that sent long yields down to just over 4.0%, around 40 percentage points less than at the start of the crisis. This decline was accompanied by a widening yield spread versus the German benchmark; a trend shared with most of Europe's larger economies.

..and sharply rising issuer risk premiums (as gleaned from CDS).

Corporate bond spreads also widened slightly with respect to governments and interbank deposits in tune with higher risk perceptions, though the fact is that the characteristics of private debt markets and the dearth of trading may also be distorting prices. For this reason, it was felt better to scrutinise aggregate data from the five-year CDS[18] (credit default swaps) of the largest Spanish issuers.

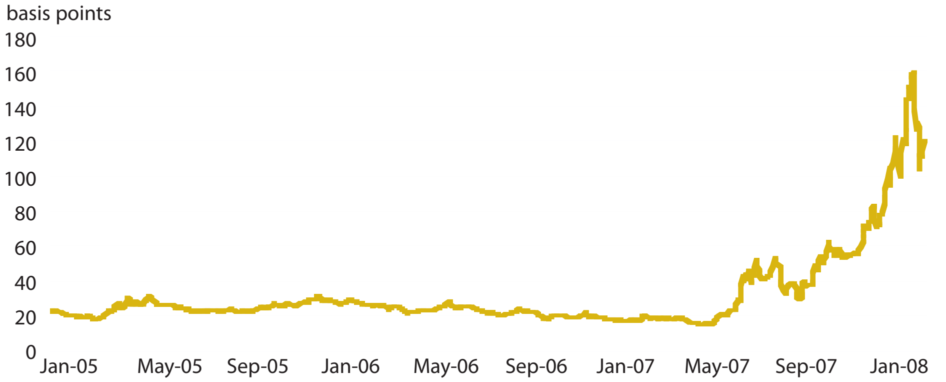
This analysis gives a much clearer picture of the rise in Spanish corporate risk premiums since the outbreak of the crisis. After a decline lasting several weeks, the aggregate premium resumed an upward course in October 2007 that shows not signs of petering out. As figure 9 shows, the five-year CSD aggregate stood upwards

18 CDS are credit derivatives whose buyers acquire protection by transferring to the seller the credit risk associated to the underlying asset in return for an agreed regular fee. In the event of default, the seller pays the buyer the equivalent of the loss. CDS are quoted in basis points, and the fees payable by the buyer are calculated by multiplying the same by the notional amount of the contract.

of 100 basis points at the end of March; an over 90 point increase versus the pre-crisis level, which is slightly more than with other European references.

We can see from table 10 that tougher borrowing conditions caused companies to rein in debt issuance in the year's last quarter, pending the normalisation of the markets. The exceptions were commercial paper and asset-backed securities. Specifically, issues of commercial paper surged to €442,000 million from €334,000 million in 2006, and remained the most abundant in the closing quarter. Sales of asset-backed securities, meantime, recorded steady growth throughout the year up to and including the fourth quarter. Finally, 2007 issuance exceeded €141,600 million against the €91,600 million of 2006, with fourth-quarter volumes, moreover, actually tripling those of the previous quarter. The overall pattern of fixed-income issuance has remained much the same in 2008 albeit with sharply lower volumes compared to the first quarter of 2007. It should be stressed that a large portion of asset-backed securities are being acquired by the originating entities, in order to stock up on assets for eventual sale or for use as collateral against central bank funds. In fact, the disruption of international debt market trading – especially in instruments linked to the mortgage market – and the still unsettled state of interbank markets have led Spanish financial institutions to increase their recourse to Banco de España financing in the framework of Eurosystem monetary policy operations[19].

Aggregate risk premium[1] based on the five-year CDS of Spanish issuers[2] FIGURE 9



Source: Thomson Datastream and authors. Data to 31 March.
1 Weighted for each issuer's capitalisation.
2 Data from July 2007 corresponding to eleven issuers (nine at the start of the sample).

19 Spanish credit institutions' net borrowing from the ECB moved up from a monthly €20,000 million approximately between January and September (average of daily data) to over €44,000 million in December (January 2008, €39,644 million and February, €44,067 million). This represents an increase in Spanish banks' share of Eurosystem injected funds from around 4%-5% to over 9.0%, in line with our economy's relative weight in the euro area.

Gross fixed-income issues filed[1] with the CNMV

TABLE 10

					2007				2008
	2004	2005	2006	2007	I-07	II-07	III-07	IV-07	I-08
NUMBER OF ISSUES	**257**	**263**	**335**	**334**	**88**	**86**	**76**	**84**	**72**
Mortgage bonds	17	21	37	32	8	10	9	5	9
Territorial bonds	2	3	6	8	2	1	4	1	7
Non convertible bonds and debentures	95	93	115	79	31	25	20	3	7
Convertible/exchangeable bonds and debentures	2	4	1	0	0	0	0	0	0
Asset-backed securities	48	54	82	101	17	25	19	40	18
Commercial paper facilities	62	80	83	106	28	23	20	35	27
Securitised	3	3	3	3	0	2	1	0	0
Other commercial paper	59	77	80	103	28	21	19	35	27
Other fixed-income issues	5	1	0	3	0	1	2	0	0
Preference shares	26	7	11	5	2	1	2	0	4
FACE VALUE million euros	**329,962.3**	**414,253.9**	**523,131.4**	**648,757.0**	**173,448.3**	**156,957.4**	**163,782.9**	**154,568.4**	**117,385.3**
Mortgage bonds	19,074.0	35,560.0	44,250.0	24,695.5	8,400.0	7,245.5	6,525.0	2,525.0	1,175.0
Territorial bonds	1,600.0	1,775.0	5,150.0	5,060.0	1,450.0	1,500.0	2,000.0	110,0	1,020.0
Non convertible bonds and debentures	38,123.6	41,907.1	46,687.5	27,416.0	9,982.0	9,427.0	7,750.0	257.0	604.1
Convertible/exchangeable bonds and debentures	67.4	162.8	68.1	0.0	0.0	0.0	0.0	0.0	0.0
Asset-backed securities	50,524.8	69,044.3	91,607.7	141,627.0	39,392.2	31,517.5	17,898.3	52,819.0	28,657.0
Domestic tranche	38,099.5	63,908.3	85,099.9	141,627.0	39,392.2	31,517.5	17,898.3	52,819.0	28,657.0
International tranche	12,425.3	5,136.0	6,507.8	0.0	0.0	0.0	0.0	0.0	0.0
Commercial paper[2]	214,602.8	264,359.5	334,457.0	442,433.5	114,144.1	106,967.4	122,464.6	98,857.4	85,833.2
Securitised	3,723.6	2,767.5	1,992.7	464.8	156.0	138.8	85.0	85.0	133.0
Other commercial paper	210,879.2	261,592.0	332,464.3	441,968.7	113,988.1	106,828.6	122,379.6	98,772.4	85,700.2
Other fixed-income issues	428.1	89.3	0.0	7,300.0	0.0	225.0	7,075.0	0.0	0.0
Preference shares	5,541.5	1,356.0	911.0	225.0	80.0	75.0	70.0	0.0	96.0
Pro memoria:									
Subordinated issues	8,871.2	11,078.5	27,361.5	47,158.3	14,481.7	3,777.6	12,702.1	16,196.9	2,312.5
Covered issues	97,791.9	94,368.0	92,213.5	121,608.5	39,392.2	31,616.5	17,898.3	32.701.5	8,215.3

Source: CNMV.
1 Incorporating issues admitted to trading without a prospectus being filled.
2 Figures for commercial paper issuance correspond to the amount placed.

Negative sentiment towards structured products has extended to the Spanish securitisation market, despite the high quality of issuer instruments.

Increased turnover in asset-backed securities in 2007 owes basically to their greater use in Banco de España monetary policy operations. Of remaining transactions, six securities alone account for over 50% of 2007 turnover, while fewer than a fifth of the securities admitted to trading generated any activity in the year (table 11). We can see then that growing distrust of structured products in the wake of the mortgage crisis has also made itself felt in the Spanish securitisation market in the form of a reduction in placements, desultory trading and a fall in the prices of the market's most liquid references. This scenario is basically about the diminishing worldwide popularity of structured products. Because the securitisation process in Spain generates high-quality assets supported on the low default rate of the underlying loans, the fact there is next to no transfer of credit risk, which will typically stay on the balance sheet of the originating bank, and the financial soundness of the banking sector (see text box on "Recent developments in securitisation" at the end of this section).

Asset-backed securities: number of securities needed to reach % of turnover (excluding operations with Banco de España)

TABLE 11

	No. of securities needed to reach % of turnover				% securities listed (excluding BdeE)	No. of securities outstanding
	25%	50%	75%	100%		
Jan 07	2	9	26	161	18.15%	887
Feb 07	1	4	12	175	19.62%	892
Mar 07	1	4	11	186	20.31%	916
Apr 07	1	2	9	146	15.82%	923
May 07	1	4	12	152	15.85%	959
Jun 07	1	2	8	168	17.32%	970
Jul 07	1	6	20	192	18.46%	1,040
Aug 07	1	6	27	177	16.48%	1,074
Sep 07	1	6	22	236	21.97%	1,074
Oct 07	2	5	18	171	15.60%	1,096
Nov 07	1	3	9	192	16.89%	1,137
Dec 07	4	11	28	218	18.84%	1,157
Jan-08	3	9	20	185	15.11%	1,224
Feb-08	2	6	21	209	16.98%	1,231
Mar-08	1	41	56	244	19.54%	1,249

Source: AIAF and authors.

The future performance of private fixed-income markets will hang on how far and fast confidence is restored in the financial situation of issuing companies, financial institutions most of all.

The normalisation of debt market financing will come when confidence is restored in the issuing companies.

If all is well, the release of audited financial statements in the first half of 2008 should help reactivate interbank markets and allow the pricing system to resume its function as a discriminating mechanism for issue quality, ushering in a return to normality in corporate bond and other fixed-income issuance. Agents' risk aversion will not necessarily remit with the normalisation of market conditions. More likely is a re-pricing of financial instrument risk to beyond the levels of the pre-crisis period.

The international crisis has opened a number of debates, among them the role of the rating agencies, ...

In any case, the mortgage crisis has spurred debate in national and international forums about the lessons to be learned. Among the most commented topics are [20]:

- **Rating agencies:** The role of these agencies in the international mortgage and financial crisis has been called into question in recent months. The controversy revolves basically around two points. The first is the possible existence of conflicts of interest in the conduct of their activity, localised in their role as advisers to issuing companies and the fact it is they – and not investors – who pay the valuation bills. The second is the methodology that agencies employ. In particular, criticisms have been levelled at their lack of transparency regarding the valuation criteria used (though this has improved somewhat in recent years), and at the relevance of their models – based on historical regularities – for a macro and financial landscape in constant flux. In any event, current ratings are unable to capture all the risks of the instruments under analysis. Agencies, we should remember, use an approach based on "expected loss" and may neglect improbable risk events that nonetheless have a high potential impact on asset returns (tail risk) and therefore a significant bearing on investment decisions. Finally, their ratings give no account of the instrument's liquidity; an all-important factor in the recent crisis.

20These and another two topics were singled out as crisis lessons in reports by the Financial Stability Forum (Report of the Financial Stability Forum on Enhancing Market and Insititutional Resilience) and the International Monetary Fund (Global Financial Stability Report), published in April 2008.

Hence the discussions underway about refining the legal framework for their activity along the lines followed in the United States. The first step promises to be a reform of the rating agency code of conduct drafted by IOSCO. This code can provide a platform for tightening up the sector's self-regulation mechanisms and generalising rules of conduct subject to supervisory oversight.

... problems of market transparency ...

- **Market transparency:** One of the roots of the credit market crisis was the difficulty knowing the real extent of financial institutions' exposure to certain kinds of risk. The culprits in this case were new credit transfer mechanisms, the extreme complexity of structured products and the scant information given out about the nature and performance of their underlying assets. Also, some markets – typically fixed income – lack effective disclosure pathways for important pre- and post-trade variables. All these shortcomings must be addressed by regulatory reforms that ensure investors a better quality of information.

... and the difficulties involved in valuing complex products.

- **Need for standardisation:** The problems brought to light in markets for complex products call for a reflection, at least, on the virtues of more standardised investment and financing instruments. The industry itself might wish to think about proposing categories of structured products that lend themselves to accurate valuation and could give rise to markets of adequate depth.

Recent developments in securitisation

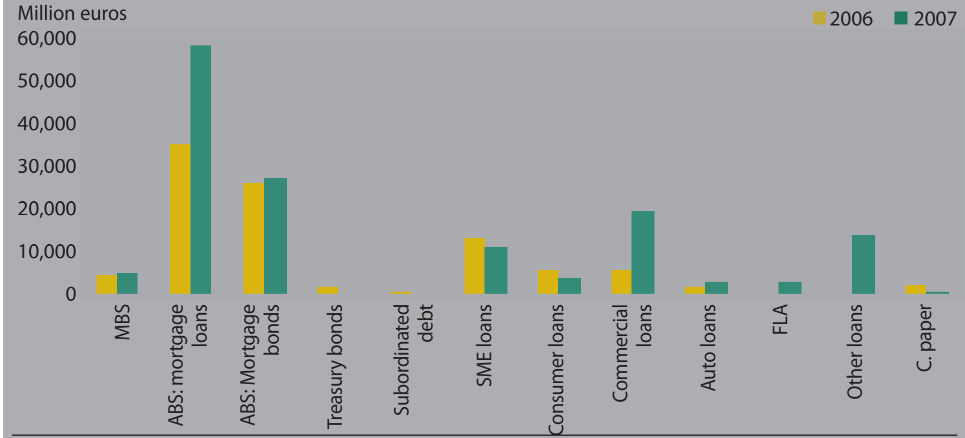
The growth of the securitisation market in these last few years evidences how the practice of securitisation has become increasingly widespread among financial institutions. The need to draw in funds to cover their rapidly expanding mortgage business positioned banks and savings banks from the outset as the main sellers of securitised issues (between 94% and 97%). The year 2007 brought some important novelties in this market. Savings banks were again the biggest source of asset-backed securities (over €64,000 million), but with the bank segment coming up fast (+72%) to over €59,000 million at the annual close. This trend would be at least partly due to their eligibility as collateral in ECB financing operations. Note also the increased representation on the seller side of institutions like the Instituto de Crédito Oficial (ICO). Finally, non financial companies raised their share but are still a marginal presence only. Foreseeably this will change as market borrowing conditions normalise, given the value of such instruments to non financial firms as an alternative source of finance or a risk management tool.

In tandem with this increase in the number and nature of entities securitising on a regular basis, the range of assets being packaged has also grown with time. Although mortgage securitisation (via MBS[21] or ABS[22] backed by mortgage loans, mortgage bonds or developer loans) remains the dominant mode in the securitisation industry, in the last year its relative weight has dropped to 63% of operations compared to 69% in 2006. The low (though slightly rising) NPL ratios of home purchase loans confer a quality seal on these securitised assets. The advance in other financial instruments is primarily concentrated in the commercial and other loans categories.

21 Mortgage-backed securities.
22 Asset-backed securities.

As regards the investor public, there are various points to make. Firstly, that we are looking at a purely institutional market. The sophisticated financial structure of these products and the valuation difficulties they pose means they are mainly directed at qualified investors. Secondly, Spanish financial institutions have been so eager to acquire them for funding purposes that they now account for 66% of total subscriptions as against 30% during most of the last decade. It is this growth, along with the post-crisis lull in international markets, that explains the dwindling share of non resident investors, from 66% in 2006 to just 34% in 2007.

Securitisation in Spain by type of asset: bonds and commercial paper FIGURE 10



Source: CNMV.
FLA: Financial lease arrangement.

Securitisation in Spain 2007: subscriber sector and issue ratings TABLE 12

Million euros	AAA	GROUP A[1]	GROUP B[2]	GROUP C[3]	TOTAL	% total
Financial institutions	87,375	2,744	2,415	820	93,353	66
Banco de España						
Credit institutions	83,303	2,640	2,259	787	88,989	63
Spanish residents	81,654	2,610	2,224	787	87,274	62
Foreign residents	1,650	30	36	0	1,715	1
Other financial institutions	4,072	104	156	33	4,364	3
Investment firms	3,513	68	80	5	3,665	3
Financial ancillaries	559	36	76	28	700	0
Insurance undertakings	667	1	18	0	686	0
Public authorities	10	0	0	0	10	0
Non financial companies					0	0
Households					0	0
Non financial companies					0	0
Total Spanish market	**88,052**	**2,745**	**2,433**	**820**	**94,049**	**66**
Financial institutions	41,302	743	395	8	42,448	30
Rest	4,715	268	148	0	5,131	4
Total foreign market	**46,017**	**1,011**	**542**	**8**	**47,578**	**34**
Total subscribed	**134,069**	**3,755**	**2,975**	**827**	**141,627**	**100**

Source: CNMV.
1 Bonds rated in the interval [AA++,A-] as per Standard and Poor's.
2 Bonds rated in the interval [BBB+,B-] as per Standard and Poor's.
3 Bonds rated lower than B- as per Standard and Poor's.

Table 12 also shows how the subscription share falling to Spanish credit institutions increases as the rating gets lower to almost 100% in the riskiest grades (equity). This highlights a distinctive trait of the Spanish market: namely that domestic credit institutions carry practically all the credit risk of securitised assets.

In other words, the "originate to distribute" model that is currently being slated as an indirect cause of the mortgage market crisis in the United States has no relevance in the Spanish case. The fact the risk stays on bank sector balance sheets means outstanding Spanish issues are generally of high quality: Not only do the underlying assets conserve a low default rate, but they enjoy a *de facto* guarantee from the originating entities, which moreover stand out for their capital strength.

4 Market agents

4.1 Investment vehicles

Financial collective investment schemes[23]

The collective investment industry has been registering an outflow of funds since end 2006. Among the factors at work are the changed tax treatment of savings, which has eroded their relative advantage over deposits, and the losses of capital generated by rising interest rates. This trend was accentuated in the last four months of 2007 by the uncertainties accompanying the international mortgage and financial crisis. Finally, net redemptions in the year reached a decade-long high of over €20 billion[24]. All fund categories[25] reported sizeable outflows, with the sole exceptions of guaranteed fixed-income funds and hedge funds and funds of hedge funds. Among the categories where redemptions bit deepest were global, short fixed-income and equity funds.

Investment fund assets fall off sharply with net redemptions reaching record levels...

Redemption volumes amply exceeded the returns earned on fund portfolios, resulting in an aggregate decline in assets under management to €255 billion at the 2007 close (5.7% less than one year before). Again, the fall was extensive to all categories except guaranteed fixed-income funds, which profited from the mounting uncertainty of the year's closing quarter. In all, investment funds managed a bare 2.7% return in 2007 compared to the 6% approximately of 2006, with falling international equity markets as the principal culprit. Spanish equity funds, conversely, earned an annual 8%, the highest of the categories figuring in table 13, with returns holding up strongly in all but the third quarter.

...as a result of tax changes and investor uncertainty.

Spanish collective investment schemes (CIS) stand out for their low risk profile (over two thirds of assets held in fixed-income and guaranteed schemes) and above par liquidity, though last year brought a small shift to riskier investment as manifest in the slightly higher weight of the equity portfolio (up from 22% in 2004 to around 25% in 2007[26]) and fixed-income portfolio readjustment in favour of corporate vs. government bonds[27]. In any case, the conservative bent of Spanish CIS has helped them come through the recent turbulence in relatively good shape.

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23 Although this term includes hedge funds and funds of hedge funds, we make no separate reference to them here, since they are the subject of their own sub-section further ahead.
24 Over 70% of net redemptions took place in the fourth quarter of 2007.
25 As per the grouping shown in table 13.
26 Accompanied by a decline in the fixed-income portfolio from 74% to 67% of assets, with the remainder up to 100% corresponding to warrants and options, the unlisted portfolio, cash and receivables/payables.
27 In the domestic portfolio, the weight of private fixed-income rose from 14% in 2004 to 24% in 2007, while public fixed-income dropped back from 23% to 16%.

Main investment fund variables[1] TABLE 13

Number	2006	2007	2007 I	2007 II	2007 III	2007 IV
Total investment funds	**2,822**	**2,926**	**2,872**	**2,919**	**2,920**	**2,926**
Fixed income[2]	606	600	609	606	604	600
Balanced fixed income[3]	212	204	207	211	203	204
Balanced equity[4]	222	207	215	216	216	207
Spanish equity	118	123	118	118	121	123
International equity[5]	467	481	480	488	485	481
Guaranteed fixed-income	220	251	232	237	241	251
Guaranteed equity	559	590	577	586	589	590
Global funds	418	470	434	457	461	470
Assets (million euros)						
Total investment funds	**270,406.3**	**255,040.9**	**273,412.8**	**276,600.4**	**269,907.1**	**255,040.9**
Fixed income[2]	116,511.9	113,234.1	116,963.0	116,344.7	118,489.4	113,234.1
Balanced fixed income[3]	15,314.5	13,011.9	15,755.0	15,329.1	14,142.3	13,011.9
Balanced equity[4]	10,149.2	8,848.0	10,090.7	10,289.1	9,753.4	8,848.0
Spanish equity	10,416.4	7,839.4	11,238.3	9,523.4	8,353.3	7,839.4
International equity[5]	24,799.6	22,698.4	25,759.1	29,428.3	26,453.8	22,698.4
Guaranteed fixed-income	14,484.8	17,674.4	15,179.1	15,810.4	16,291.2	17,674.4
Guaranteed equity	44,796.6	42,042.1	43,998.9	44,140.0	43,365.6	42,042,1
Global funds	33,933.3	29,692.6	34,428.9	35,735.4	33,058.2	29,692,6
Shareholders						
Total investment funds	**8,637,781**	**8,053,049**	**8,740,972**	**8,755,921**	**8,467,203**	**8,053,049**
Fixed income[2]	2,960,879	2,763,442	2,933,505	2,881,128	2,869,191	2,763,442
Balanced fixed income[3]	524,827	493,786	551,786	539,799	511,811	493,786
Balanced equity[4]	357,013	331,214	374,508	376,559	359,667	331,214
Spanish equity	317,386	288,210	341,396	363,017	343,208	288,210
International equity[5]	1,258,426	1,089,868	1,274,138	1,263,619	1,184,871	1,089,868
Guaranteed fixed-income	497,540	549,108	518,940	541,442	540,637	549,108
Guaranteed equity	1,783,867	1,715,144	1,771,469	1,766,834	1,754,596	1,715,144
Global funds	937,843	822,277	975,230	1,023,523	903,222	822,277
Return[6] (%)						
Total investment funds	**5.59**	**2.73**	**1.11**	**1.65**	**-0.15**	**0.10**
Fixed income[2]	1.95	2.71	0.72	0.65	0.63	0.68
Balanced fixed income[3]	4.18	1.93	0.94	0.96	-0.16	0.18
Balanced equity[4]	10.34	2.69	1.71	2.57	-1.17	-0.40
Spanish equity	33.25	8.02	5.78	2.07	-2.42	2.53
International equity[5]	14.98	2.13	2.12	6.38	-2.80	-3.28
Guaranteed fixed-income	0.83	2.78	0.59	0.29	1.03	0.84
Guaranteed equity	4.66	2.44	0.56	1.62	0.13	0.12
Global funds	4.01	1.47	0.99	1.57	-0.70	-0.38

Source: CNMV.
1 For data on subscriptions and redemptions, see table 5.
2 Includes: Short and long fixed-income, international fixed-income and money market funds.
3 Includes: Balanced fixed-income and balanced international fixed-income.
4 Includes: Balanced equity and balanced international equity.
5 Includes: Euro equity and international equity Europe, Japan, United States, emerging markets and others.
6 Annual return for 2006 and 2007 and non annualised quarterly return for each quarter of 2007.

To get a more precise handle on Spanish schemes' exposure to the international mortgage and financial crisis we must first scan for the presence of assets linked to the sub-prime mortgages whose slump in value started the trouble. Further, as one of the effects of the crisis has been a liquidity contraction in certain fixed-income and structured product markets, we must also consider funds' exposure to the assets harder to shift in current market conditions.

As advised by the CNMV in its press release of 23 August 2007, only 14 collective investment products (nine investment funds and five SICAVs) have any direct

Spanish CIS have next to no direct exposure to the products affected by the US mortgage crisis.

portfolio exposure to assets "contaminated" by the US mortgage crisis. The combined worth of these vehicles amounted at the time to 0.0162% of total CIS assets. Specifically, they were invested in three French schemes which temporarily suspended redemptions on the grounds that some of their bond holdings were backed by sub-prime paper. Of the Spanish funds affected, only one had to resort to partial redemptions, as envisaged in article 48.7 of the Collective Investment Scheme Regulation – the case of having over 5% of assets in a foreign CIS that has suspended subscriptions and redemptions. When investment was below this threshold, the CNMV instructed managers to issue a significant event notice[28], thus ensuring maximum transparency to current and prospective shareholders.

Analysis of CIS investments reveals that only 6% of portfolio assets could be classed as lacking in liquidity ...

A second type of analysis entails quantifying fund investments in less liquid products. Measuring the liquidity of a portfolio of financial instruments is no easy task in the absence of reliable indicators about how readily a given asset can be sold on the market. One possible indicator is the frequency with which a price communicator quotes bid and ask prices in its respect. Applying this indicator to the private fixed-income portfolio, which is where illiquid products will potentially be concentrated, reveals – with the reservations due to a less than perfect measurement tool – that the percentage of illiquid holdings is relatively modest.

As we can see from table 14, private fixed income (including instruments deriving from the securitisation of bank loans) represents 40% of the total Spanish CIS portfolio (December 2007). Of this percentage, just under half (15% of the portfolio) is commercial paper; that is, short-term securities that investors will typically hold to maturity. Subtracting commercial paper, only a quarter of private-fixed income holdings (6.3% of the portfolio) were not quoted on any occasion by the chosen price communicator.

... even those in the securitisation categories.

Asset-backed securities, at a little over 21% of private fixed income (8.6% of the portfolio), are just under half of the potentially illiquid assets (2.3% of the portfolio).

This low exposure to hard-to-sell instruments plus an abundance of highly liquid assets like deposits and repos (15% to 18% of the portfolio), suggests that Spanish CIS can cope reasonably comfortably with the present liquidity shortage in fixed-income markets.

28In accordance with articles 19 of the Law on Collective Investment Schemes and 28.1 of the corresponding Regulation.

Private fixed-income holdings (Dec 07) TABLE 14

a) Volume and composition of the fixed-income portfolio

Type of asset	Volume (million euros)			% private fixed-income		
	Domestic	Foreign	Total	Domestic	Foreign	Total
Commercial paper	37,579.3	-	37,579.3	37.4	-	37.4
Mortgage bonds	2,466.7	-	2,466.7	2.5	-	2.5
Structured products	4,161.2	4,176.6	8,337.7	4.1	4.2	8.3
Securitisation	11,909.0	9,440.1	21,349.1	11.9	9.4	21.3
Other private fixed-income	4,228.8	26,467.0	30,695.8	4.2	26.4	30.6
TOTAL	60,344.9	40,083.7	100,428.6	60.1	39.9	100.0

b) Percentage of assets with and without market quotation

Type of asset (% portfolio)	Bloomberg price	No Bloomberg price
Mortgage bonds	1.0	-
Structured products	2.1	1.2
Securitisation	6.3	2.3
Other private fixed-income	9.5	2.8
TOTAL	18.9	6.3

Source: CNMV.

In any case, if the abnormal state of trading on certain markets lasts longer than expected, CIS managers will have to take regular depth soundings of the markets where their portfolio instruments are traded, as prescribed in article 40 of the current Regulation. They should also operate appropriate valuation criteria for instruments lacking a reliable market benchmark, for which internal models are employed. Specifically, such models should be able to correctly evaluate liquidity premiums in line with the market conditions of the moment. Finally, with financial institutions likely to be engrossed in strengthening their liquidity positions, managers within banking groups must make doubly sure that conflict of interest mechanisms are functioning properly.

Although the industry prospects are generally good, managers should be alert to the depth of investee markets and apply reliable valuation criteria to forestall any conflicts of interest.

Real estate collective investment schemes

Real estate funds were less affected by the slowdown in collective investment. Finally, assets under management rose almost 1% to over €9,121 million, contrasting with the decline suffered by financial CIS. This growth, however, pales in comparison to the 35% of 2006 and 50% of 2005. It also drew exclusively on portfolio gains, considering that the outflow of funds in the third and, especially, the fourth quarter far exceeded the inflows of the first six months, in a clear break with the pattern of the previous years. Aggregate returns (5.3%) were a little lower than in 2006 (6.0%), while the number of shareholders (funds and companies) dropped by 3.1% to just over 146,000.

Real estate CIS also registered sizeable outflows in 2007, but their large portfolio returns kept assets on an even keel.

Main real estate fund variables TABLE 15

	2004	2005	2006	2007	2007 I	2007 II	2007 III	2007 IV
FUNDS								
Number	7	7	9	9	9	9	10	9
Shareholders	86,369	118,857	150,304	145,510	152,902	153,630	151,916	145,510
Assets (million euros)	4,377.9	6,476.9	8,595.9	8,608.5	8,781.7	8,929.4	8,905	8,608.5
Return (%)	6.65	5.35	6.12	5.30	1.31	1.1	1.53	1.26
COMPANIES								
Number	2	6	8	9	8	8	9	9
Shareholders	121	256	749	843	754	769	661	843
Assets (million euros)	56.4	213.9	456.1	512.9	459.2	487.4	504.3	512.9

Source: CNMV.

Their risk has augmented with their degree of exposure to a faster contraction of the real estate market.

Despite being a small segment of the industry (just 3.1% of the total assets of all collective investment schemes marketed in Spain[29]), their risk has recently augmented amid concerns about a sharper-than-envisaged downturn in Spanish real estate. This exposure, moreover, has increased in the past few quarters in line with the rising portfolio weight of their property investments[30].

Hedge funds

The hedge fund segment has fared reasonably well in its short life (barely a year), even at the height of financial market uncertainty. That said, it is still only a small parcel of the Spanish collective investment industry. At end December 2007, a total of 31 funds of hedge funds and 21 hedge funds were registered with the CNMV, with combined assets of over €1,446 million (0.5% of total CIS assets) and more than 5,000 shareholders (0.1% of the total). The philosophy of hedge funds is to seek a positive total return independent of the market environment. Their short history means it is too soon to judge the success of their strategies. In any event, their third quarter performance was the worst of the year as with all other investment fund categories.

Hedge funds and funds of hedge funds have done relatively well in their first full year of life.

The start-up of these schemes was eagerly received, with subscriptions flooding in from the second quarter onwards, especially to funds of funds. The outlook for hedge funds is not conditioned by the same factors as the rest of the industry, given their freedom of investment strategy. For instance, while a traditional fund would incur losses in the event of a significant run-down in equity prices, a hedge fund taking the appropriate short positions could come out with gains. Even so, the final results of their strategies depend on such key factors as market liquidity, allowing them to take and unwind positions at relative speed, and the availability of finance[31]. And it is in this last factor that their main risk lies. In the event of further turbulence on the markets from which credit entities draw their funding, hedge funds could find themselves struggling to raise the finance needed to optimise their leveraged investment strategies, to the detriment of their income statements.

Their outlook is not conditioned by the same factors as other collective investment schemes.

29Excluding foreign schemes marketed in Spain, for which no Q4 2007 data were available at the closing date of this report.
30In aggregate terms, property investments moved up from 72.5% of real estate fund assets in 2005 to 84.4% in 2007.
31Under Spanish legislation, these schemes can borrow up to five times their total assets.

Main hedge fund variables TABLE 16

	2006	2007			
	IV	I	II	III	IV
Funds of hedge funds					
Number	2	2	22	30	31
Shareholders	2	26	1,456	3,142	3,880
Assets (million euros)	0.6	9.5	600.2	829.2	1,000
Return (%)	ns	-0.55	1.08	-2.14	0.67
Hedge funds					
Number	5	6	9	17	21
Shareholders	21	108	183	251	1,127
Assets (million euros)	24.4	119.9	152.0	210.2	445.8
Return[1] (%)	ns	1.26	3.18	-2.20	-0.39

Source: CNMV.
1 Non annualised quarterly return.
ns: not significant.

4.2 Investment firms

Investment firms perform a series of functions in relation to securities markets, ...

Investment firms perform a number of functions in the securities market sphere (see the text box that follows on investment service provision in Spain). The most common have to do with channelling customers' orders or managing their investments. The list comprises securities broker-dealers, who are authorised to trade on their own account, brokers and portfolio management companies. A later sub-section discusses the role and performance of other non bank financial intermediaries, namely CIS management companies and venture capital entities.

...and differ widely not only in size but also by earnings and business mix.

Spanish investment firms are a fairly mixed group. Not only do they differ in size and scale of earnings, but also in the structure of the fees they charge. Broker-dealers, for instance, tend to specialise in the processing of orders, a function which brought in over 64% of their 2007 fees. Brokers too depend significantly on order processing (42% of total fees) but more of them specialise in other areas (24% in investment fund purchases and redemptions and 9% in portfolio management).

All categories of investment firms grew their earnings in 2007, with broker-dealers to the fore thanks to busy own-account and customer activity...

Broker-dealers, brokers and portfolio managers all grew their profits in 2007. Broker-dealers posted a large increase in income from both customer and proprietary trading. This strong performance, allied with modest growth in operating expenses, enabled them to advance in efficiency while conserving their high profitability ratios. Specifically, the aggregate gross income[32] of the broker-dealer contingent[33] closed at over €1,021 million, 24% more than in 2006. The busy stock market year delivered a 24% rise in their largest fee item ("order processing and execution"), while the item next in importance "fund subscriptions and redemptions") was slightly down (-0.8%) on the year before, in tune with the slowing demand for collective investment products. Coming up fast in the year were "design and advising" fees, which closed just a little behind the third placed item "distribution and underwriting"; down 15% as a consequence of the subdued primary market activity of the year's second half.

32Includes three items: net interest income and result on securities transactions (both own account activities) and net fee income (customer activity).
33Excluding the figures of one broker-dealer which books part of its proprietary trading under "Other profit and loss", with a distorting effect on aggregates such as "result on securities transactions" and thereby "gross income" and "net operating income".

...while the broker group owed most of their profit growth to non recurrent activities.

Among the broker group, both main revenue items (fees) and operating costs registered a flat evolution in the year, so profits growth was largely due to non recurrent business. Aggregate gross income among this group rose by 1.9% to €247 million, while net fee income was up 5.5% overall, with the growth of "order processing and execution" (18%), and "fund subscriptions and redemptions" (10.4%) offsetting the decline under "portfolio management" (-6%) and a sharp increase in fees and commissions paid (17.6%).

Aggregate income statement TABLE 17

	Broker-dealers		Brokers	
Thousand euros	2006	2007	2006	2007
I. NET IINTEREST INCOME	92,820	124,946	12,548	14,008
II. RESULT ON SECURITIES TRANSACTIONS	54,611	115,584	2,277	610
III. NET FEE INCOME	675,708	780,958	227,278	232,122
Fee income (=1 to 9)	892,542	1,063,826	289,756	305,601
1. Order processing and execution	550,658	684,530	108,329	127,876
2. Distribution and underwriting	73,261	62,145	3,158	2,477
3. Securities custody and administration	21,069	25,112	1,490	1,680
4. Portfolio management	22,472	29,649	29,093	27,353
5. Design and advising	34,339	52,645	2,217	2,224
6. Search and placement	0	9	0	0
7. Margin trading	32	23	0	0
8. Fund subscriptions and redemptions	137,035	135,979	66,985	73,928
9. Others	53,676	73,734	78,484	70,063
Fee expense	216,834	282,868	62,478	73,479
IV. GROSS INCOME (=I+II+III)	823,139	1,021,488	242,103	246,740
10. Operating expenses	376,089	415,309	149,953	152,540
V. NET OPERATING INCOME (=IV-10)	447,050	606,179	92,150	94,200
11. Depreciation and other charges	16,798	87,182	9,011	12,558
12. Other profit and loss	131,153	171,655	7,550	31,413
VI. PROFIT BEFORE TAXES (=V-11+12)	561,405	690,652	90,689	113,055
VII. NET PROFIT	388,190	484,355	61,333	81,832

Source: CNMV.

Portfolio management companies obtained a combined gross income of over €16.6 million against €15.8 million in 2006 with net interest income and core portfolio management business as the main growth drivers. Also noteworthy was the increase in fees under "fund subscriptions and redemptions".

...in both cases, return on assets and return on equity continued at highs.

The income growth of broker-dealers kept profitability ratios running at highs. Return on assets (ROA) closed near 6%, one point less than at end 2006, while return on equity (ROE) inched up from 43% to 44%. Among the brokers, these same ratios closed at 10.2% against 10% in 2006, and just under 45%, up from 36% the year before. The number of firms with ROE falling short of the annual gain of the Ibex-35 dropped from 66 in 2006 to 31 in 2007.

Figures 11 and 12 offer a breakdown of changes in ROE[34] for the broker-dealer and broker categories starting from the year 2000; with reference to leverage, asset productivity, efficiency, taxes and provisions and other charges. The main conclusions of this analysis are as follows:

- In the case of broker-dealers, the 2006 leap in ROE had a large extraordinary component (proceeds of the sale of stock exchange manager

34See box.

BME), but was also driven by efficiency and productivity gains. In 2007, conversely, the indicator's more modest growth traced to firms' higher leverage and improvements in efficiency, while asset productivity contributed on the negative side.

- In the case of brokers, the 2006 increase drew on the positive performance of almost all ROE components. In contrast, 2007 growth (at a rate similar to in 2006) was almost exclusively due to provisions and extraordinaries, as stated, and changes in leverage. Asset productivity, finally, detracted from the return while efficiency made a near zero contribution.

The strength of sector earnings has brought a renewed decrease in the number of firms in losses, in line with the trend initiated in 2003. Specifically, just over 8% of operators reported losses in their end 2007 results. The percentages were highest among non exchange member brokers (13.6%) and portfolio management companies (9.1%), though the scale was by no means alarming; a bare 1.2% of aggregate earnings.

Also, the number of firms reporting losses and the scale of the same reduced once more in 2007.

ROE breakdown

Return on equity (ROE) is the end product of a series of management variables relating to productive efficiency, competitive strength, risk exposure and financial structure, among other factors. Hence an increase in ROE will mean different things depending on whether its cause is an improvement in competitiveness or greater risk exposure (via higher leverage). There follows an algebraic breakdown for ROE that allows us to isolate the effect of changes in each factor on its performance over time, and determine when improvements are due to mainly positive factors to do with efficiency and wealth creation.

$$ROE = \frac{Netprofit}{Equity(tier1)} = \frac{Netprofit}{NOI} * \frac{NOI}{GI} * \frac{GI}{A} * \frac{A}{Equity} * 100$$

Or put another way, $ROE = (1 - \frac{T}{PBT}) * \frac{PBT}{NOI} * \frac{NOI}{GI} * \frac{GI}{A} * \frac{A}{Equity} * 100$; in which:

T: Corporate income tax
PBT: Profit before taxes
NOI: Net operating income
GI: Gross income
A: Total assets
Tier 1: higher-quality equity

The annual change in ROE is expressed as the sum of changes (log differences) in each of the factors considered for the universe of broker-dealers and brokers. We will now look at how each of the five product terms can be interpreted:

1) Tax indicator (1-T/PBT). An increase in this indicator would point to a lower tax liability for the same result.

2) Provisions and extraordinaries indicator (PBT/NOI). Indicating a firm's financial strength in that a higher figure means provisioning for risks and contingencies and/or extraordinary losses are detracting less from the company's overall result. Note, though, that an increase could also be due to higher extraordinary income, so any resulting increase in ROE would not be sustained over time.

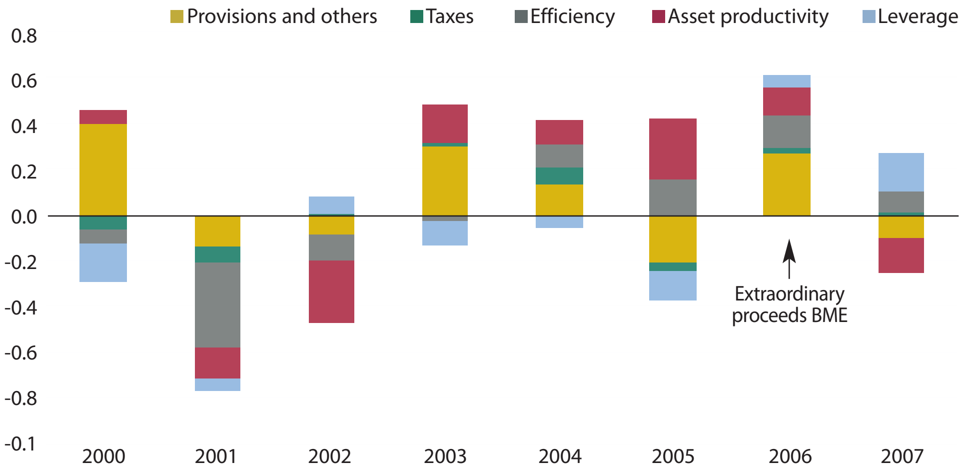
3) Efficiency indicator (NOI/GI). Also expressable as (1-Efficiency ratio(1)) such that an increase in efficiency (higher 1-ER) would imply an increase in ROE driven by management improvements.

4) Asset productivity indicator (GI/A). ROE improvement drawing on this indicator could be read as a higher value-added extracted from each euro of assets.

5) Leverage/debt indicator (A/Equity). As stated, an increase in leverage will only add to ROE if ROA is higher than the cost of external borrowings. In any case, an excessive rise in leverage means a greater risk of insolvency or bankruptcy, meaning the company is financially fragile.

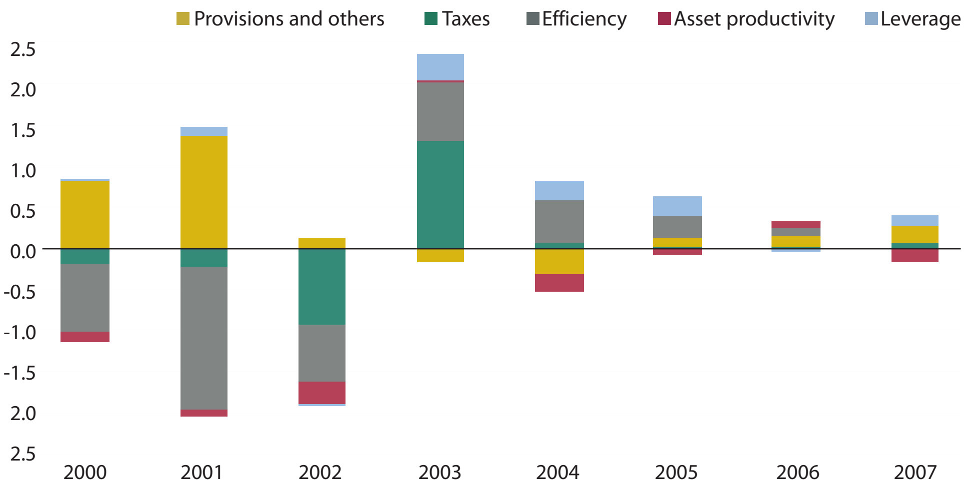
Similar proposals for the algebraic breakdown of ROE can be found in the *Informe de Estabilidad Financiera* published by Banco de España in May 2004 and the Bank of England's *Financial Stability Review* of December 2003.

Breakdown of year-on-year change in ROE: broker-dealers FIGURE 11



Source: CNMV and authors.

Breakdown of year-on-year change in ROE: brokers FIGURE 12

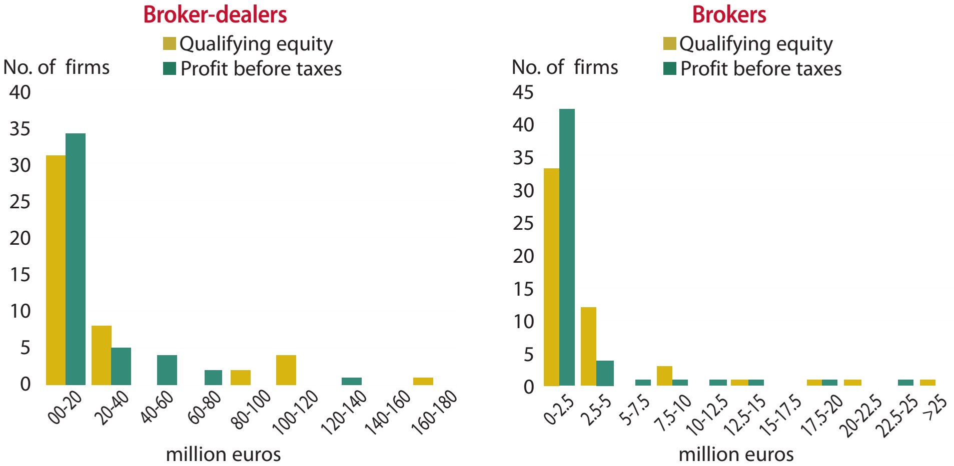


Source: CNMV and authors.

Investment firms as a rule are comfortably compliant with capital adequacy requirements. Overall, their equity surplus in 2007 was on a par with the previous year's. In the case of broker-dealers this surplus stood at 4.2 times the minimum requirement (the same as in 2006), while the surplus for brokers was 2 times (2.1 times in 2006). Portfolio management companies, finally, presented 0.6 times the minimum requirement against 0.8 times in 2006. Among the firms with the tightest margin (less than 50% of required capital) two belonged to the broker-dealers contingent against nine brokers and three portfolio management companies.

Investment firms, broker-dealers in particular, are comfortably compliant with capital standards.

Investment firms distribution by pre-tax profits and equity 2007 FIGURE 13



Source: CNMV. 2007 results. Qualifying capital at 31/12/07.

Investment firms have felt no direct fallout from the mortgage crisis, as they do not carry related instruments in their trading books. Their main business continues to be the provision of investment services (i.e., distribution activity), and their main income stream, the fees earned from customer orders, has shown no signs of thinning out as a consequence of market turbulence. In fact some firms have benefited from the increase in trades that tends to accompany more nervous markets.

The international mortgage and financial crisis appears not to have done much harm to investment firm business.

At the same time, the growing quantity of business these firms have been doing is a test for the efficiency of their internal control mechanisms. Already one entity has been directly affected by customer defaults in OTC derivate trades.

Generally speaking, firms should be able to conserve their high standards of profitability and capital adequacy, even through a period of slower business. This will, however, put stronger demands on their risk management systems, with particular regard to the credit and liquidity risk emanating from customer transactions. Another short-term challenge for sector operators will be their adaptation to the new Securities Market Law, transposing the Directive on Markets in Financial Instruments[35] (MiFID). This legislative change implies both new organisational structures and a new way of handling the customer relationship[36] which may substantially alter their business mix. It will also introduce more competition within the European financial services market, as Spanish firms are

... but important challenges remain as regards risk control systems, the need to adapt to the requirements of the MiFID and growing competition in European investment services markets.

35For more information, see section 5 of this report on securities market organisation, which devotes a special sub-section to MiFID implementation.
36See text box on "Suitability and appropriateness testing" in section 5.

beginning to find out. The challenge they face is to coax out new improvements in efficiency and ensure they have the capacity on hand to offer Spanish clients a complete investment service anywhere in Europe.

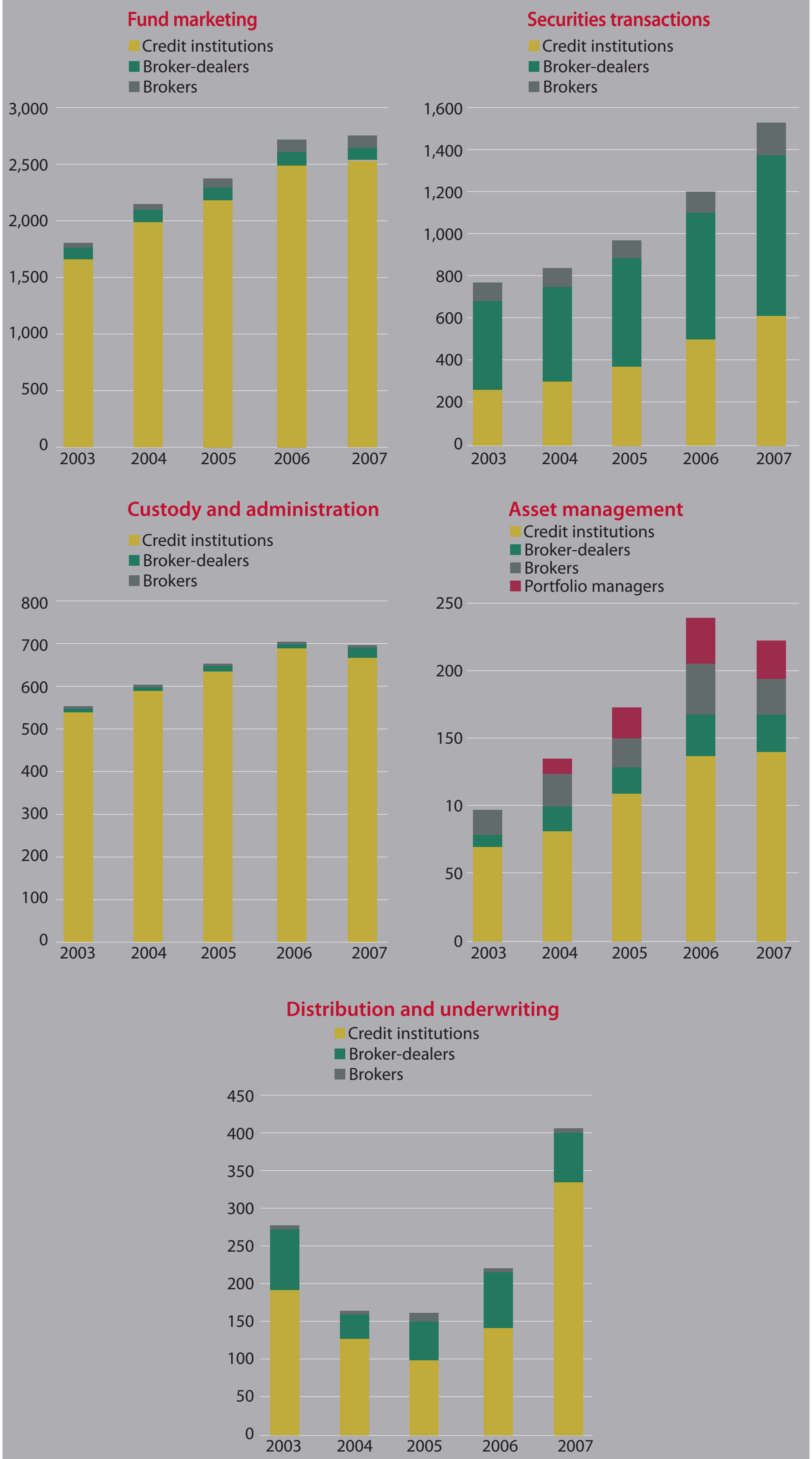
Investment services provision in Spain: the role of credit institutions

The provision of investment services is governed by the Securities Market Law[37], which establishes what is meant by investment services and which entities are qualified to perform them. Its article 63 offers a list of such services, including the reception, forwarding and execution of customer orders, portfolio management, the distribution of financial instruments, the underwriting of securities issues and advising on investment matters[38]. It also envisages a range of ancillary services, including securities custody and administration, that are subject to the same rules. The provision of investment services is reserved for investment firms (broker-dealers, brokers, portfolio management companies and financial advisors) and credit institutions. The latter may render all the services envisaged in the law assuming their legal regime, bylaws and individual licences authorise them to do so. Both credit institutions and investment firms can trade professionally, on customers' or their own account, and perform all the investment and ancillary services legally permitted. Brokers may only trade on customers' behalf, with or without representation, but may perform all other services except the lending to investors of securities or cash. Portfolio managers and financial advisors are the most circumscribed in their operations, with the former confined to the advising and managing of investment portfolios and the latter to the strict provision of investment advice. Investment firms are in all respects authorised and supervised by the CNMV, which also oversees the investment service operations of credit institutions, while their prudential supervision falls to Banco de España.

A structural analysis of the investment services industry (see figures below) reveals the dominant position of credit institutions. In the last five years, their share has ranged from 73% to 77% of total fee income, against the 17%-21% and 5%-6% respectively of broker-dealers and brokerage firms. They also take the lion's share of securities custody and administration business[39] (96% of income) and the sale of investment fund units (92% of income), thanks to the distribution muscle of their branch networks. In securities trading, the field is more open, with broker-dealers taking in 51% of sector income. Finally, portfolio management is the activity that is most widely diversified by sector agent.

37 Title V.
38 Recently enacted Law 47/2007 which, among other matters, implements the MiFID, extends the range of investment services to include investment advice and the management of multilateral trading facilities, and also introduces a new type of investment firm, the "financial advisor" authorised exclusively to render advisory services in investment matters.
39 The differences are striking: a market value of €2,188 billion (30 June 2007) for the securities deposited at credit institutions against €92 billion worth at broker-dealers and brokers (as of 31 December).

Fee income from investment services (million euros) FIGURE 14



Source: CNMV and *Banco de España*.

4.3 Collective investment scheme management companies

CIS managers did slightly worse in 2007 as the industry turned down...

CIS managers too have fared reasonably well though with some slight earnings slippage versus the previous year. A total of 19 managers (out of 120 registered) reported losses, eight more than in 2006, though this was partly due to recent start-ups in the hedge fund and fund of hedge fund categories. In fact, eight of the 19 loss-making managers did not join the register until 2007 or late 2006. Of the other 11, five had declared losses persistently since 2005[40] at least, and six intermittently in preceding years or in the last two alone.

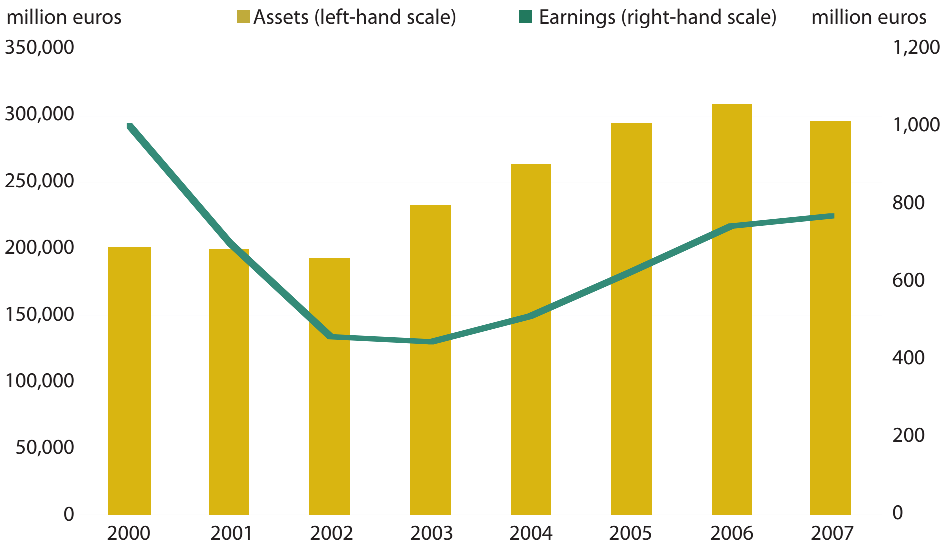
... but with profitability ratios holding up strongly

Return on equity (ROE) dropped to a mid-year 61% from the 69% of December 2006, though this is still high in historical terms. This aggregate decline can be explained by reference to: (i) the levelling-off of fund managers' profits growth, and (ii) an 18% increase in own funds.

In the short term, competition between managers will remain fierce as demand stays mainly focused on bank deposits.

The slower advance in profits reflects the general slowdown in the collective investment industry as a result of tax changes and the banks' new aggressiveness in capturing deposits. Managers are also experiencing fiercer competition both among themselves and with credit institutions, which have been cutting their prices in order to hang onto the greatest possible quantities of clients and assets. The business and earnings outlook for the next few months will continue to be coloured by the international financial crisis and its attendant uncertainties, with investors tending to shy away from investment fund products in favour of traditional bank deposits .

CIS management companies: assets under management and profit before taxes[1] FIGURE 15



Source: CNMV.

40Including one manager in losses since 2001 and another since 2004.

CIS management companies: profit before taxes and ROE

TABLE 18

Million euros	Profit before taxes	ROE before taxes
2000	1,005.8	84
2001	701.7	63
2002	457.1	44
2003	445.3	44
2004	512.3	49
2005	622.8	53
2006	744.0	69
2007	790.6	61

Source: CNMV.

CIS management companies: assets under management, management fees and average fees

TABLE 19

Million euros	Assets managed	Fund management fee income	Average fund management fee (%)	Fee ratio (%)[1]
2000	200,832	2,869	1.429	63.46
2001	199,427	2,465	1.236	65.78
2002	192,982	2,259	1.171	72.70
2003	232,915	2,304	0.989	73.78
2004	263,369	2,672	1.015	73.58
2005	294,372	2,976	1.011	72.17
2006	308,476	3,281	1.063	71.55
2007	295,907	3,206	1.084	70.22

Source: CNMV.
1 Fee expense on fund distribution to fee income from fund management.

4.4 Other intermediaries: venture capital

A total of 61 venture capital entities joined the CNMV register in 2007, breaking down 33 companies, 16 funds and 12 fund managers. These come on top of the sixty entities registering in 2006, of whom 27 were companies, 22 funds and 11 fund managers[41].

CNMV registers evidence a new increase in venture capital entities operating in Spain.

Data from the industry association in Spain (ASCRI) show that venture capital entities invested €4,298 million in 2007, 44.4% more than in 2006 and beating the 2005 record of €4,198 million. Transaction numbers (776) were likewise 26.7% up on the 2006 figure. Divestments in the year summed €1,547 million, an increase of 18.8%, with transactions down by nine to 331[42].

Investment and transaction numbers attained record levels in 2007...

Movements in the CNMV venture capital register 2007

TABLE 20

	Situation at 31/12/2006	Registrations	Removals	Situation at 31/12/2007
Entities	**221**	**61**	**6**	**276**
Venture capital funds	64	16	4	76
Venture capital companies	102	33	1	134
Venture capital fund managers	55	12	1	66

Source: CNMV.

41 Part of this increase owes to the provisions of Law 25/2005 of 24 November regulating venture capital entities and their management companies. This law allows for a speedier registration process in the hands of the CNMV. Prior to its enactment, numerous entities engaging in venture capital activities (ECRs) were not entered in the corresponding register. The new law addresses this problem by establishing a more simplified form of ECR; a more flexible investment vehicle with less protectionist rules for qualified investors. Now, venture capital entities can invest in other ECRs or acquire listed companies to withdraw them from trading. The former option has encouraged the creation of venture capital funds specialising in other ECRs and targeted mainly on the retail public.
42 Two 2007 divestments went through as initial public offerings, involving Clínica Baviera and Fluidra.

... though the financial crisis has tended to drive down the size of investments.

Although the sector recorded a strong full-year performance, the last quarter brought signs of change, particularly a fall in investment (€910 million against an average of €1,096 million in the first three quarters) and a jump in transaction numbers (225 against an average 135 in the first three quarters). In all, credit market tensions in the year's closing months signalled a drier period for investment.

What were slated to be the year's headline operations involving European venture capital entities – their entries to Iberia and Altadis – eventually fell through. These cancellations reflect the decline observed in leveraged buyout transactions (LBO), which tend to be the largest sized (55% of the total invested in the year).

Spanish entities could continue to outperform their European peers, despite a shrinkage in investment volumes.

Within the general sector trend towards more modest investment levels, Spanish entities should fare rather better than their counterparts elsewhere in Europe. The reasons are three: (i) the LBOs most affected by bank credit rationing will tend to be the biggest sized transactions that are less predominant in the Spanish market, (ii) venture capital entities enjoy a favourable tax treatment in Spain, making it easier for them to recruit investor funds[43] and (iii) the success of Spanish venture capitalists in raising new funds for investment; an estimated €3,049 million in 2007[44]. Also likely is a reduction in the size of industry divestments and less frequent recourse to initial public offerings, in what threatens to be a more adverse economic-financial climate. Indeed, some entities had to call off plans for stock market launches in the second half of 2007[45].

5 Changes in securities market organisation

For investment firms, the current international juncture has coincided with a period of transformation ...

The current international setting as mapped out in the preceding sections coincides with a period of industry transformation, as Spanish firms readjust their structure and operations in line with the financial integration process[46]. Two challenges stand out on the immediate horizon. Firstly, the entry to force of the MiFID in November 2007 means investment service providers must adapt their organisational forms and rules of conduct. And second, Spanish post-trade infrastructures may shortly be caught up in a new wave of changes of a legal and operational nature.

5.1 MiFID implementation

... deriving from the entry to force of the MiFID.

The publication of Law 47/2007 of 19 December amending Securities Markets Law 24/1988 marks an important step forward in transposing MiFID provisions into Spanish legislation. Although the new law will require subsequent regulatory developments that flesh out the provisions firms must adhere to, its

43 Article 35 of Law 25/2005 establishes a 99% tax exemption on capital gains from the transfer of ECR stakes.
44 We might mention here the closure of the vehicles launched by Mágnum (€850 million), N+1 (500 million), Artá Capital (500 million, with 50% contributed by Corporación Financiera Alba and Mercapital), Nazca (150 million), Realza Capital (120 million), N+1 Capital Empresarial (120 million) and Miura (60 millions).
45 For instance, the owners of Eolia and High Tech.
46 As contemplated in certain measures emanating from the EC's Financial Services Action Plan, and also in market initiatives like the Code of Conduct signed by post-trade providers in November 2006.

text presents important novelties with a bearing on the way investment firms conduct their business.

Pre-MiFID legislation already imposed certain organisational requirements on firms operating in Spain that have since been written into the European Directive[46]. Among the new obligations it brings in are the need to operate a business continuity plan and, in general, have plans in place to cover operational risk, including legal/compliance risk. A possible sticking point here is that these continuity plans depend for their success on a very small number of companies equipped to offer back up services.

The new Directive may usher in structural changes further ahead in a context of greater European competition.

A core MiFID requirement is that firms class their clients according to a standard scheme, and run appropriateness and suitability tests on the services they are offered (see text box on "MiFID appropriateness and suitability testing"). And they must also have a defined "best execution" policy in respect of customer orders, requiring a series of process changes in the firms that supply this kind of service. This policy, moreover, cannot be the same for retail as for professional clients, with the result that some investment firms may opt to specialise in one or other segment.

Finally, the triggering event for even more radical changes in market organisation would be the decision by a Spanish or international investment service provider to set up and manage an MTF[47] specialising in shares listed on the Spanish exchanges. Under the terms of the MiFID, firms rendering investment services can also become systematic internalisers[48] (SI) and offer securities trading services. There is a chance that some operator may opt to do so, especially if it already has a sizeable portfolio of institutional clients. In any event, the transparency requirements the MiFID imposes for MTFs and SIs mean that such an initiative may have to wait some time.

The CNMV worked throughout 2007 to assist investment service providers in adapting to the MiFID.

The CNMV has sought to smooth the transition by means of an intense publicity and informative effort. Described below are just two of the numerous initiatives set in train to help firms make a trouble-free transition to the new regulatory environment:

- A document was sent out to all financial institutions in July 2006 to canvass them about their adaptation plans. CNMV teams also held meetings with the most representative of their number to assess the state of progress, the main obstacles they were encountering and the solutions each had found. It was clear from these contacts that both financial entities and their associations were working all out to ensure MiFID conditions were implemented.

- A dedicated discussion forum was launched in 2006 with the involvement of CNMV and Banco de España and the main associations representing financial institution interests. The work of the Financial Intermediaries Expert Group brought to light the key issues and success drivers in the MiFID adaptation process, which were then circulated to the interested public in Q&A format.

47Investment firms and credit institutions.
48For instance, the organisational requirements for the control of investment firm activities were laid down in CNMV Circular 1/98 of 10 June on internal systems for the control, monitoring and ongoing evaluation of risks. Spanish legislation also lays down rules of conduct for investment service providers in Royal Decree 629/1993 of 3 March and its implementing provisions.
49Multilateral trading facility.

The CNMV has given investment firms ample time to adapt themselves to the MiFID framework and has simplified the necessary authorisation procedures; in short, sparing no effort so firms can make the adjustment with a minimum of fuss.

MiFID suitability and appropriateness testing

One of the main changes introduced by the MiFID and its implementing regulations is the requirement that obligated subjects run a suitability test in determined circumstances. This is a safeguard measure to ensure the investment services provided to clients are right for their particular needs.

The suitability test is regulated in article 19.4 of Directive 2004/39/EC and implemented in articles 35 and 37 of Directive 2006/72/EC. Although gathering and processing the information needed for this test will call for a major adaptation effort, it is one of the provisions that will generated the most value-added for investment service users. The services for which the test is compulsory for investment providers[50] are advising on investment matters and discretionary portfolio management. The following input must be procured from the customer:

1. Knowledge concerning the type of product or service proposed.
2. Experience in the investment field relevant to the specific type of product or service (kinds of products he/she is familiar with, the nature and size of transactions, frequency, period, educational background, profession).
3. Financial situation (source and level of income, assets, regular financial obligations).
4. Investment goals (time horizon, risk profile, purpose of the investment).

Informational requirements regarding the customer's knowledge and experience in the corresponding investment field will depend on the type of client, the nature and level of the service, and the product or operation being proposed (proportionality principle). Suitability test contents will also vary in the case of professional clients.

Only when a product's suitability can be established, i.e., when: (i) it meets the customers' investment goals, (ii) he or she can confront the degree of risk consistent with these goals, and (iii) he or she has sufficient knowledge and experience to understand the risk involved in the transaction or the management of his/her portfolio, can the investment firm issue the pertinent recommendation or render the proposed portfolio management service. If the firm cannot gather the necessary information it must refrain from providing the investment advice or portfolio management service. In the latter case, moreover, is not enough just to establish suitability at the start of the arrangement, it must also be re-checked each time the manager makes a recommendation, suggestion or request to a customer for the issue or modification of a mandate defining the scope of its discretionary management.

50Investment firms, as defined by Directive 2004/39/EC and credit institutions authorised pursuant to Directive 2000/12/EC when they provide investment services or activities, according to article 1.2 of Directive 2004/39/EC.

The Directive also stipulates that investment firms must keep a record of all information gathered for suitability testing. The work done by CESR on level 3 measures makes reference to this requirement.

The appropriateness test is another MiFID requirement[51]. The idea in this case is to ascertain the customer's knowledge and experience with regard to the product or service being proposed or sought. The investment service provider can omit this test in the following circumstances: (i) the non complexity of the financial instruments in question, (ii) the service is to be rendered at the client's request, (iii) the client has been told that the investment firm is not obliged to assess the appropriateness of the proposed instrument or service, so knows he/she is not protected under the corresponding rules of conduct and (iv) the service provider is compliant with its obligations in regard to conflicts of interest. The orientative content of the test is similar to that of points 1 and 2 of the suitability test, as discussed above. The principle of proportionality is likewise upheld and the firm must keep a record of the information gathered. The provider is also relieved of the need to run appropriateness tests for professional clients, when it can be assumed that this categorisation implies sufficient knowledge and experience to understand the risks of the products, services or transactions in question. In certain cases, a provider can also allege that a customer's previous investments in similar instruments imply that he or she is sufficiently knowledgeable and experienced.

If an investment firm concludes that a transaction/product/service is not right for a given customer, it may still go ahead providing it first conveys this opinion to the interested party. The same holds when it has been unable to gather enough input information; in which case it should warn the client that it cannot be sure whether the product or service meets his or her interests.

In closing, a few brief words on the relationship between the suitability and appropriateness tests. As stated, the first is reserved for products or services that entail an element of recommendation, i.e., investment advice or portfolio management. If a firm is going to provide some other investment service involving products or services on which a suitability test has already been run, it can dispense with the appropriateness text. In all other cases, this test will be necessary.

5.2 Developments in the post-trade sphere

The Spanish clearing, settlement and registration system (the System) must take immediate steps to adapt its procedures to the MiFID rules transposed through Law 47/2007 of 19 December, and the commitments entered into as a signatory to the voluntary Code of Conduct (CoC[52]). In particular, it must be prepared to grant System access to non resident investment firms, with or without a physical establishment in Spain, that wish to directly settle trades on Spanish securities closed outside of Spanish regulated markets, and attend access or interoperability requests from other European clearing and settlement systems or central counterparties.

The Spanish trading and settlement system will have to line up with new European initiatives.

51 Set out in articles 19.5 and 19.6 of Directive 2004/39/EC.

52 The Code of Conduct was published on 7 November 2006 to enhance the transparency of post-trade service pricing, enlarge interoperability between markets, securities depositories and central counterparties and introduce the separate accounting and administration of operator services. It arose from an initiative of internal market commissioner Charles McCreevy and was adopted voluntarily by a majority of the industry.

All this will mean far-reaching changes in operational procedures, including the establishment of direct communication channels with investment firms[53] so they can clear and settle their non market operations, and a review of current procedures for the matching, validation, clearing and settlement of such transactions and their registration, including daily update of the file records of issuers of registered securities, and checks on issue balance controls, securities matching and, where applicable, procedures for the provision of pooled and supplementary collateral.

These changes will take their place alongside improvement measures already approved by the System directors, including a new liquidity provision facility (final lender) and the solution of problems to do with the recognition of purchase settlements.

Developments to address these challenges should prioritise the closest possible alignment with the settlement practices and standards in widest use among European Union member countries, so the System can keep pace with the gathering process of market integration, and strengthen its capacity to attract international business, and conserve existing clients, in an increasingly competitive landscape.

In the medium term, the System should be alert to all the possibilities offered by the new Target-2 Securities platform, which will allow central securities depositories and their participants to settle transactions in central bank money throughout the euro area. This will mean exploring possible technical improvements in the present system, analysing where change is needed in legal and procedural rules, and setting a realistic timetable for completion. Among the current specifications that may not fit well with the future single market are the overly rigid system of trade registration, transaction finality at the point of trade rather than settlement (more common internationally) and the absence of a central counterparty to cover cash transactions in equity and fixed-income markets.

6 Conclusions

The performance of Spanish securities markets since summer 2007 has been conditioned by the disruption ensuing from the sub-prime mortgage crisis in the United States. The effects of this crisis have been to cloud the global macroeconomic outlook, reduce the liquidity of interbank and private fixed-income markets, and prompt a sizeable re-pricing of risk in world markets.

The pattern in Spain has been similar to elsewhere; namely, a notable correction in share prices – though less abrupt than in other markets – the enlargement of risk premiums and a liquidity shortfall in fixed-income markets, including bank asset securitisation markets. In particular, the crisis has engendered a negative investor

53The MiFID gives legal sanction to the non exchange trading of listed securities. In stock markets, for instance, it will no long be necessary to channel all trades through an exchange. However, the System is not equipped to handle trades without the mediation of an exchange; the only venue which can affix registration and transaction codes, respectively, to securities purchases and sales for their subsequent settlement and registration.

sentiment towards bank sector paper, which has fallen on all issues regardless of their objective quality.

The Spanish securities and financial industries are in reasonably good shape to confront this unsettled period, thanks to the overall vigour of the economy – despite some degree of slowdown – and the soundness of main financial intermediaries. But both prices and activity will ultimately depend on how the key uncertainty factors pan out. These are, firstly, the extent of slowdown in the Spanish and international economy and, secondly, the speed at which financial market conditions normalise. Of special importance here is how soon price formation mechanisms can be restored to order in securitisation markets and private fixed-income markets in general.

Most of the agents participating in Spanish markets should come through the crisis without too large a dent in their income statements, and far less in their capital adequacy. However, collective investment products like investment funds could face significant near-term challenges; in particular growing competition from bank deposits due to credit institutions' greater difficulties in raising finance on the markets. At the same time, CIS management companies will have to make doubly sure that the mechanisms to prevent conflicts of interest between them and the bank groups many of them belong to are operating effectively. Finally, although the collective investment sector as a whole is amply positioned in readily transferable assets, the situation of the markets counsels constant surveillance of the liquidity of trading venues.

Liquidity problems in certain markets may counsel the use of internal valuation models for positions in the corresponding instruments. They also place difficulties in the way of their practical application. Listed companies, intermediaries and investment vehicles should accordingly redouble their efforts at transparency and information quality, in line with international accounting standards, to ensure there is no discrepancy between their published financial statements and the underlying financial reality.

Although the business of investment service providers is only moderately sensitive to the current market situation, firms will have tighten up their risk control systems and take immediate steps to meet the operational requirements of the new Securities Market Law implementing the MiFID directive. Further ahead, they could find their competitive quality put to the test in the framework of the emerging pan-European competition that the Directive will help to consolidate.

This changed regulatory environment will also extend to the infrastructures of national regulated markets, which may end up competing with alternative trading platforms such as MTFs and systematic internalisers. At the same time, new legal and operational developments in the post-trade sphere represent an important impetus towards integration, of which national systems must strive to be part. This will mean reviewing the technical peculiarities of the Spanish settlement system, and debating on the wisdom of its near-term adaptation to the model prevailing in most advanced countries.