CNMV
Comisión Nacional del Mercado de Valores

CNMV BULLETIN

Quarter II

2012

CNMV Bulletin

Quarter II
2012

The CNMV publishes this Quarterly Bulletin to spread studies in order to contribute to the best knowledge of the stock markets and their regulation.

The opinions in these articles are the sole responsibility of the authors and they do not necessarily coincide with those of the CNMV.

The CNMV distributes its reports and publications via the Internet at www.cnmv.es.

ISSN (Printed edition): 1887-8458

ISSN (Digital edition): 1988-253X

Depósito legal: M-20083-2008

Layout: Composiciones Rali, S.A.

Printing: Artegraf, S.A.

Table of contents

Abbreviations

ABS	Asset Backed Securities
AIAF	Asociación de Intermediarios de Activos Financieros (Spanish market in fixed-income securities)
ANCV	Agencia Nacional de Codificación de Valores (Spain's national numbering agency)
ASCRI	Asociación española de entidades de capital-riesgo (Association of Spanish venture capital firms)
AV	Agencia de valores (broker)
AVB	Agencia de valores y bolsa (broker and market member)
BME	Bolsas y Mercados Españoles (operator of all stock markets and financial systems in Spain)
BTA	Bono de titulización de activos (asset-backed bond)
BTH	Bono de titulización hipotecaria (mortgage-backed bond)
CADE	Central de Anotaciones de Deuda del Estado (public debt book-entry trading system)
CCP	Central Counterparty
CDS	Credit Default Swap
CEBS	Committee of European Banking Supervisors
CEIOPS	Committee of European Insurance and Occupational Pensions Supervisors
CESFI	Comité de Estabilidad Financiera (Spanish government committee for financial stability)
CESR	Committee of European Securities Regulators
CMVM	Comissão do Mercado de Valores Mobiliários (Portugal's National Securities Market Commission)
CNMV	Comisión Nacional del Mercado de Valores (Spain's National Securities Market Commission)
CSD	Central Securities Depository
EAFI	Empresa de asesoramiento financiero (financial advisory firm)
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
ECLAC	Economic Commission for Latin America and the Caribbean
ECR	Entidad de capital-riesgo (venture capital firm)
EIOPA	European Insurance and Occupational Pensions Authority
EMU	Economic and Monetary Union (euro area)
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
ETF	Exchange traded fund
EU	European Union
FI	Fondo de inversión de carácter financiero (mutual fund)
FIAMM	Fondo de inversión en activos del mercado monetario (money-market fund)
FII	Fondo de inversión inmobiliaria (real estate investment fund)
FIICIL	Fondo de instituciones de inversión colectiva de inversión libre (fund of hedge funds)
FIL	Fondo de inversión libre (hedge fund)
FIM	Fondo de inversión mobiliaria (securities investment fund)
FSB	Financial Stability Board
FTA	Fondo de titulización de activos (asset securitisation trust)
FTH	Fondo de titulización hipotecaria (mortgage securitisation trust)

IAASB	International Auditing and Assurance Standards Board
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
IIC	Institución de inversión colectiva (UCITS)
IICIL	Institución de inversión colectiva de inversión libre (hedge fund)
IIMV	Instituto Iberoamericano del Mercado De Valores
IOSCO	International Organisation of Securities Commissions
ISIN	International Securities Identification Number
LATIBEX	Market in Latin American securities, based in Madrid
MAB	Mercado Alternativo Bursátil (alternative stock market)
MEFF	Mercado Español de Futuros y Opciones Financieros (Spanish financial futures and options market)
MFAO	Mercado de Futuros del Aceite de Oliva y Opciones Financieros (olive oil futures market)
MIBEL	Mercado Ibérico de Electricidad (Iberian electricity market)
MiFID	Markets in Financial Instruments Directive
MMU	CNMV Market Monitoring Unit
MoU	Memorandum of Understanding
OECD	Organisation for Economic Co-operation and Development
OICVM	Organismo de inversión colectiva en valores mobiliarios (UCITS)
OMIP	Operador do Mercado Ibérico de Energía (operator of the Iberian energy derivatives market)
P/E	Price/earnings ratio
RENADE	Registro Nacional de los Derechos de Emisión de Gases de Efectos Invernadero (Spain's national register of greenhouse gas emission permits)
ROE	Return on Equity
SCLV	Servicio de Compensación y Liquidación de Valores (Spain's securities clearing and settlement system)
SCR	Sociedad de capital-riesgo (Venture capital company)
SENAF	Sistema Electrónico de Negociación de Activos Financieros (electronic trading platform in Spanish government bonds)
SEPBLAC	Servicio Ejecutivo de la Comisión de Prevención del Blanqueo de Capitales e infracciones monetarias (Bank of Spain unit to combat money laundering)
SGC	Sociedad gestora de carteras (portfolio management company)
SGECR	Sociedad gestora de entidades de capital-riesgo (venture capital firm management company)
SGFT	Sociedad gestora de fondos de titulización (asset securitisation trust management company)
SGIIC	Sociedad gestora de instituciones de inversión colectiva (UCITS management company)
SIBE	Sistema de Interconexión Bursátil Español (Spain's electronic market in securities)
SICAV	Sociedad de inversión de capital variable (open-end investment company)
SII	Sociedad de inversión inmobiliaria (real estate investment company)
SIL	Sociedad de inversión libre (hedge fund in the form of a company)
SIM	Sociedad de inversión mobiliaria (securities investment company)
SME	Small and medium-sized enterprise
SON	Sistema organizado de negociación (multilateral trading facility)
SV	Sociedad de valores (broker-dealer)
SVB	Sociedad de valores y bolsa (broker-dealer and market member)
TER	Total expense ratio
UCITS	Undertaking for Collective Investment in Tradable Securities

I Market survey (*)

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

1 Overview

The year 2012 opened with some slight easing of tensions on European debt markets and the presentiment that the world slowdown might be less severe than recent forecasts would suggest. Shortly, however, renewed uncertainty about the political and economic future of Greece in the lead-up to the general elections – held finally in mid-June – caused a fresh bout of financial market turbulence, which was particularly intense in Spain.[1] With doubts about the soundness of the country's financial system putting major pressure on bank sector funding, the Spanish government formally applied for financial assistance on 25 June.

International debt markets witnessed a further run-down in US, German and UK yields, which by the end of June had dropped materially below the 2% mark in the ten-year sector. Conversely, the bond yields of Europe's most vulnerable economies resumed a steep upward trend that only remitted slightly towards the end of June, as a result, partly, of the decisions taken at the European Council on 28 and 29 June. The yields of this set of countries did not however recoup the highs recorded in November 2011. Debt issuance tailed off considerably in first-half 2012 versus the year-ago period with the public and financial sectors leading the shrinkage. Among banks, concretely, net financing remained negative in both the United States and Europe.

On international equity markets, the widespread gains of the opening quarter, as high as 20% in some cases, could not be sustained. The subsequent price slide was particularly marked among European indices, which lost between 4.7% and 11.3% of their value, and Japanese indices, which dropped almost 10% year to date, while the largest advances were in US shares.

In Spain, the latest activity figures, for the first quarter of 2012, confirmed the extent of the growth stall, with the second consecutive GDP contraction signalling a renewed entry to recession. Key labour-market indicators do not for the moment offer much prospect of improvement in a context of persistent domestic growth weakness, while falling inflation has kept the negative differential with the euro area ahead of one half percentage point. In the public sector, the austerity drive proceeded with eyes on the year-end target of a fiscal deficit below 6% of GDP.

Spanish financial markets were in the centre of the latest storm to hit European debt markets, as concerns grew about the scale of the capital shortfall among the country's banks. Although the Spanish government announced on 9 June that it would seek financial aid for the sector, in the form of a credit line up to 100 billion euros,

1 The closing date for this report is 29 June.

debt market turmoil refused to die down. The result was that Spanish bond yields raced to a decade high in the second quarter. In the ten-year sector, yields stretched to over 7% around mid-June, pushing the spread over the equivalent German benchmark to just short of 570 bp (compared to the previous high of 470 bp in November 2011). By the end of the month, this had narrowed to 487 bp following the release of the independent auditors' report on the soundness of the Spanish financial system, and the decisions made at the European Council on 28 and 29 June.

Rising costs have tended to dampen private-sector debt issuance, particularly among banks. Although total issue volumes (in gross terms) were up 51% versus the year-ago period at 207 billion euros, much of this sum was retained by issuing institutions for use as collateral in Eurosystem credit operations. One development of note was a surge in sales of commercial paper, which has increasingly rivalled with bank deposits.

Domestic growth weakness and the doubts surrounding certain financial institutions continued to bear down on equity prices. The Ibex 35 dropped 6.5% and 13.1% in the first and second quarter respectively for a cumulative first-half fall of 17.1% (-13.1% in 2011), underperforming other European benchmark indices. All sectors covered shared in the decline, with the exception of consumer goods. Indeed this is the only sector trading above its pre-crisis levels of 2007. In all other sectors, the intervening price slide has been well ahead of 50%. Stock market trading volumes shrank by almost 23% in the first half of 2012, a trend carried over from last year, while liquidity conditions worsened. Volatility, finally, eased from almost 50% in early June to around 30% at the end of the month, a little above its historical average (25%).

Summary of financial indicators

TABLE 1

	Q3 11	Q4 11	Q1 12	Q2 12
Short-term interest rates (%)[1]				
Official interest rate	1.50	1.00	1.00	1.00
Euribor 3 month	1.54	1.43	0.86	0.66
Euribor 12 month	2.07	2.00	1.50	1.22
Exchange rates[2]				
Dollar/euro	1.35	1.29	1.34	1.26
Yen /euro	103.8	100.2	110.0	100.1
Medium and long government bond yields[3]				
Germany				
3 year	0.51	0.41	0.29	0.16
5 year	1.00	0.92	0.88	0.50
10 year	1.87	1.99	1.88	1.43
United States				
3 year	0.35	0.38	0.50	0.39
5 year	0.89	0.88	1.01	0.71
10 year	1.96	1.97	2.16	1.61
Corporate debt risk premium: spread over ten-year government bonds (bp)[3]				
Euro area				
High yield	703	739	536	643
BBB	291	287	159	173
AAA	-12	-22	-84	-124
United States				
High yield	692	683	546	642
BBB	240	261	195	244
AAA	79	98	30	46
Equity markets				
Performance of main world stock indices (%)[4]				
Euro Stoxx 50	-23.5	6.3	6.9	-8.6
Dow Jones	-12.1	12.0	8.1	-2.5
Nikkei	-11.4	-2.8	19.3	-11.3
Other indices (%)				
Merval (Argentina)	-26.7	0.0	9.0	-12.6
Bovespa (Brazil)	-16.2	8.5	13.7	-15.7
Shanghai Comp. (China)	-14.6	-6.8	2.9	-1.7
BSE (India)	-12.1	-8.0	15.6	-0.7
Spanish stock market				
Ibex 35 (%)	-17.5	0.2	-6.5	-11.3
P/E of Ibex 35[5]	8.3	9.2	9.7	8.7
Volatility of Ibex 35 (%)[6]	41.2	36.2	25.1	38.7
SIBE trading volumes[7]	3,531	3,202	2,702	3,116

Source: CNMV, Thomson Datastream, Bloomberg, Reuters, Bank of Spain, Bolsa de Madrid, MEFF and AIAF.

n.a.: not available.

1 Monthly average of daily data. The official interest rate corresponds to the marginal rate at weekly auctions at the period close. On 5 July, the ECB lowered this rate by 25 bp to 0.75%.

2 Data at period end.

3 Monthly average of daily data.

4 Cumulative quarterly change in each period.

5 Price-earnings ratio.

6 Implied at-the-money (ATM) volatility on nearest expiry at period end. Arithmetical average for the quarter.

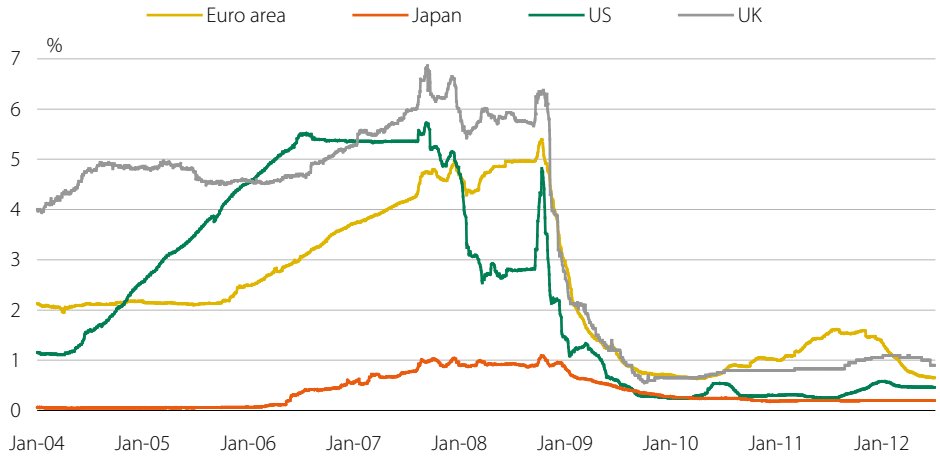
7 Daily average in million euros.

2 International financial background

2.1 Short-term interest rates

As we can see from figure 1 and table 2, short rates in main advanced economies held near the historical lows registered at end-2011. The exception was the euro area, where three-month rates fell almost 80 basis points to mid-year levels near 0.7% and six- and twelve-month rates dropped to 0.9% and 1.2% respectively, ahead of the ECB's anticipated rate cut, which arrived finally on 5 July. US rates in the same maturities held at 0.5%, 0.7% and 1.1% and those in Japan at 0.2%, 0.3% and 0.6%. The absence of significant fluctuations in the short-term rates of these economies corresponds to the flat official rates prevailing in the last few years.

Three-month interest rates FIGURE 1



Source: Thomson Datastream. Data to 29 June.

In the money markets, the spreads between deposit and repo rates in the United States and euro area narrowed from 125 bp to 50 bp and from 50 bp to 15 bp respectively over the first half of 2012. Though these are nothing like the levels of end-2008, it would be wrong to say that euro interbank markets are operating normally. As we can see from the right-hand panel of figure 2, banks' borrowing (net of deposits) from the Eurosystem moved within a relatively narrow range (between 322 and 382 billion euros), with some ups and downs, despite the two extraordinary 36-month refinancing operations launched by the ECB. The stable progress of net lending to the area's banks is partly explained by their growing recourse to the deposit facility, as far as 771 billion in the month of May. The large build-up in use of this facility from the 17 billion of June 2011 may respond to a precautionary tactic by the banks, as well as the desire to lock up cash in the central bank to meet debt redemptions as they fall due.

Short-term interest rates (%)[1]

TABLE 2

	Dec 08	Dec 09	Dec 10	Dec 11	Sep 11	Dec 11	Mar 12	Jun 12
Euro area								
Official[2]	2. 50	1. 00	1. 00	1. 00	1. 50	1. 00	1. 00	1. 00
3 month	3. 27	0. 71	1. 02	1. 43	1. 54	1. 43	0. 86	0. 66
6 month	3. 34	1. 00	1. 25	1. 67	1. 74	1. 67	1. 16	0. 93
12 month	3. 43	1. 24	1. 53	2. 00	2. 07	2. 00	1. 50	1. 22
United States								
Official[3]	0. 25	0. 25	0. 25	0. 25	0. 25	0. 25	0. 25	0. 25
3 month	1. 80	0. 25	0. 30	0. 56	0. 35	0. 56	0. 47	0. 47
6 month	2. 15	0. 45	0. 46	0. 78	0. 52	0. 78	0. 74	0. 74
12 month	2. 36	1. 00	0. 78	1. 10	0. 83	1. 10	1. 05	1. 07
United Kingdom								
Official	2. 00	0. 50	0. 50	0. 50	0. 50	0. 50	0. 50	0. 50
3 month	2. 99	0. 65	0. 80	1. 05	0. 95	1. 05	1. 06	0. 94
6 month	3. 12	0. 95	1. 05	1. 40	1. 20	1. 40	1. 38	1. 23
12 month	3. 25	1. 45	1. 50	1. 90	1. 70	1. 90	1. 92	1. 77
Japan								
Official[4]	0. 10	0. 10	0. 10	0. 10	0. 10	0. 10	0. 10	0. 10
3 month	0. 91	0. 28	0. 18	0. 20	0. 19	0. 20	0. 20	0. 20
6 month	1. 01	0. 48	0. 35	0. 34	0. 33	0. 34	0. 34	0. 34
12 month	1. 12	0. 70	0. 57	0. 55	0. 55	0. 55	0. 55	0. 55

Source: Thomson Datastream.

1 Average daily data except official rates, which correspond to the last day of the period. Data to 29 June.

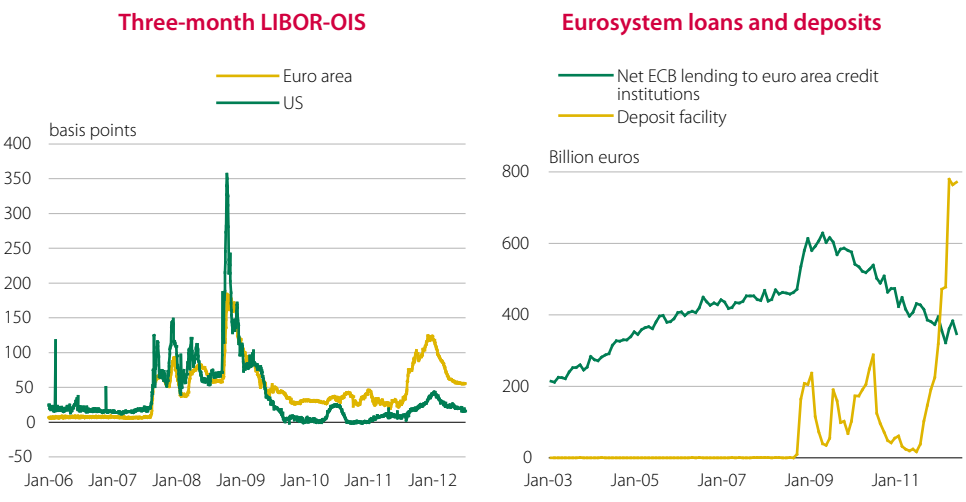
2 Marginal rate at weekly auctions. On 5 July, the ECB lowered this rate by 25 bp to 0.75%.

3 Federal funds rate.

4 Monetary policy rate.

Interbank spreads and Eurosystem financing

FIGURE 2



Source: Thomson Datastream and Bank of Spain.

Mid-year expectations for official interest rates were pricing in no change for the next 12 months in either the US or euro area (see table 3). In the emerging markets

monetary policy, the salient development was China trimming its interest rates in response to the activity stall of the recent months.[2]

Three-month forward rates (FRAs)[1] (%) TABLE 3

	Dec 08	Dec 09	Dec 10	Dec 11	Sep 11	Dec 11	Mar 12	Jun 12
Euro area								
Spot	2. 89	0. 70	1. 01	1. 36	1. 55	1. 36	0. 78	0. 65
FRA 3x6	2. 17	0. 82	1. 04	1. 06	1. 23	1. 06	0. 67	0. 52
FRA 6x9	1. 97	1. 21	1. 13	0. 93	1. 15	0. 93	0. 69	0. 48
FRA 9x12	2. 13	1. 61	1. 23	0. 90	1. 10	0. 90	0. 70	0. 50
FRA 12x15	2. 22	1. 90	1. 34	0. 91	1. 10	0. 91	0. 77	0. 53
United States								
Spot	1. 43	0. 25	0. 30	0. 58	0. 37	0. 58	0. 47	0. 46
FRA 3x6	1. 07	0. 42	0. 39	0. 65	0. 54	0. 65	0. 47	0. 49
FRA 6x9	1. 16	0. 77	0. 47	0. 71	0. 59	0. 71	0. 50	0. 50
FRA 9x12	1. 29	1. 23	0. 61	0. 75	0. 59	0. 75	0. 52	0. 53
FRA 12x15	1. 45	1. 59	0. 78	0. 75	0. 58	0. 75	0. 56	0. 55

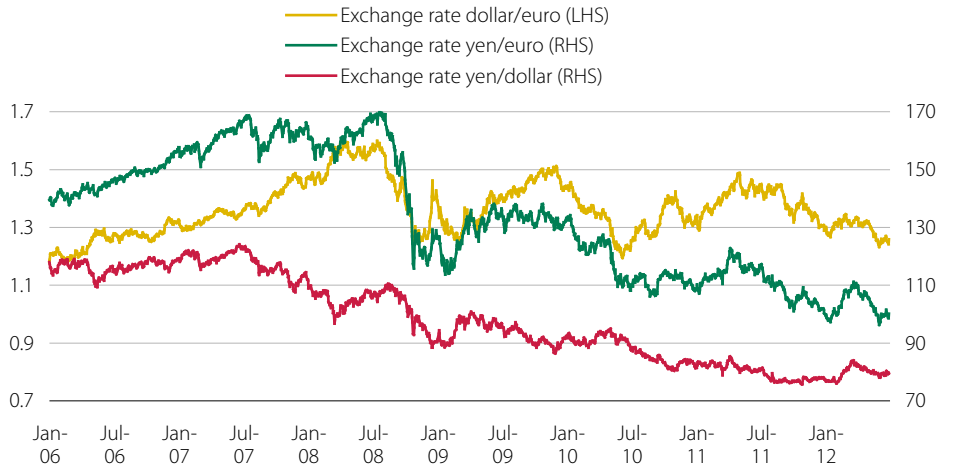
Source: Thomson Datastream.

1 Data at period end. Data to 29 June.

2.2 Exchange rates

In currency markets, after a strong start against other leading currencies, the euro began to depreciate, most markedly from May onwards, under pressure from the European debt crisis and attendant uncertainties. This downward drift took Europe's currency from 1.32 dollars in the first days of May to 1.25 dollars at end-June, and from 110 yens in March to below 100 yens in June.

Dollar/euro and yen/euro exchange rates FIGURE 3



Source: Thomson Datastream. Data to 29 June.

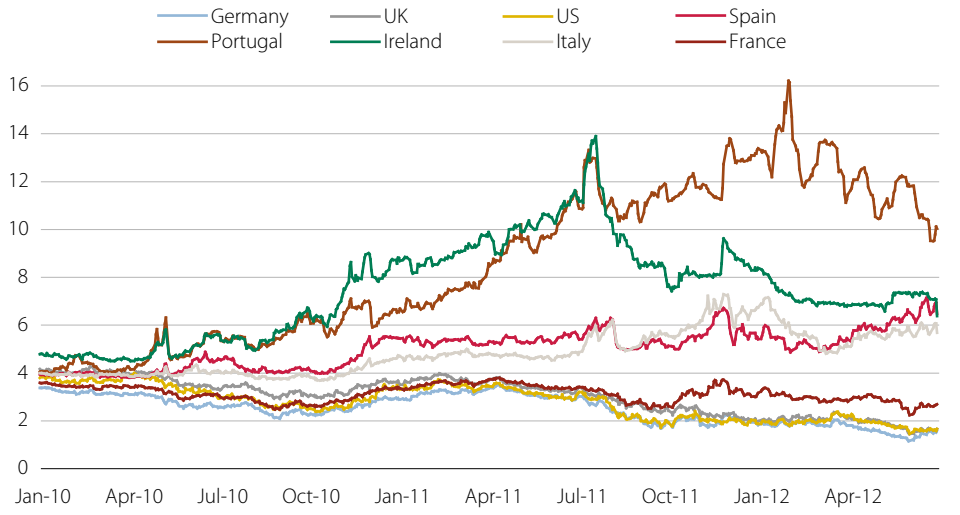
2 On 8 July, the main one-year refinancing rate was lowered by 25 bp from 6.56% to 6.31%; the first cut since 2008.

2.3 Long-term interest rates

Long-term rates in the major advanced economies conformed to the patterns emerging with the first instability episodes in the European sovereign debt crisis. Again, buying pressure focused on instruments issued in Germany, the UK and the United States, driving up prices and reducing yields to new record lows. In the ten-year maturity, German, UK and US yields, which closed last year at just under 2%, continued their descent to end-June levels of 1.6%, 1.7% and 1.7% respectively.

Conversely, after two months of relative stability, the bond yields of European economies subject to most uncertainty began heading higher as concerns grew about the results of the Greek elections and the health of Spain's financial system, for which the government formally sought assistance on 25 June.[3] Debt markets appeared to welcome the European Council decisions of 28 and 29 June, primarily the possibility to directly recapitalise the banks of a Member State and the commitment to use the European Financial Stability Mechanism (EFSM) in a flexible manner. However, at the closing date for this report (29 June), the yields of the most fragile economies remained stuck at highs, with the ten-year bonds of Portugal, Ireland, Spain and Italy trading at 10.0%, 6.4%, 6.5% and 5.7% respectively (see figure 4).

Long-term government bond yields (ten years) FIGURE 4



Source: Thomson Datastream. Data to 29 June.

As table 4 shows, yields on the sovereign bonds of the strongest advanced economies have fallen sharply since March across all reference maturities. This was nowhere truer than in Germany, where three- and five-year yields came down by 25 bp and 43 bp in the first-half period to 0.2% and 0.5%. Three- and five-year yields in the United States and the United Kingdom likewise closed the period at lows of 0.4% and 0.7% respectively.

3 On 9 June, the Spanish government had made an informal announcement that it would solicit financial assistance for the domestic banking sector, to be instrumented as a credit line of up to 100 billion euros.

Medium and long government bond yields[1] (%)

TABLE 4

	Dec 08	Dec 09	Dec 10	Dec 11	Sep 11	Dec 11	Mar 12	Jun 12
Germany								
3 year	2. 07	1. 55	1. 16	0. 41	0. 51	0. 41	0. 29	0. 16
5 year	2. 50	2. 27	1. 91	0. 92	1. 00	0. 92	0. 88	0. 50
10 year	3. 04	3. 22	2. 90	1. 99	1. 87	1. 99	1. 88	1. 43
United States								
3 year	1. 07	1. 37	0. 98	0. 38	0. 35	0. 38	0. 50	0. 39
5 year	1. 51	2. 33	1. 92	0. 88	0. 89	0. 88	1. 01	0. 71
10 year	2. 40	3. 59	3. 29	1. 97	1. 96	1. 97	2. 16	1. 61
United Kingdom								
3 year	2. 60	1. 67	1. 14	0. 55	0. 65	0. 55	0. 59	0. 37
5 year	2. 80	2. 69	2. 07	0. 82	1. 22	0. 82	1. 11	0. 74
10 year	3. 33	3. 94	3. 61	2. 12	2. 48	2. 12	2. 17	1. 59
Japan								
3 year	0. 60	0. 21	0. 25	0. 18	0. 17	0. 18	0. 17	0. 12
5 year	0. 80	0. 47	0. 46	0. 34	0. 34	0. 34	0. 32	0. 21
10 year	1. 31	1. 26	1. 18	1. 00	1. 00	1. 00	0. 99	0. 83

Source: Thomson Datastream.

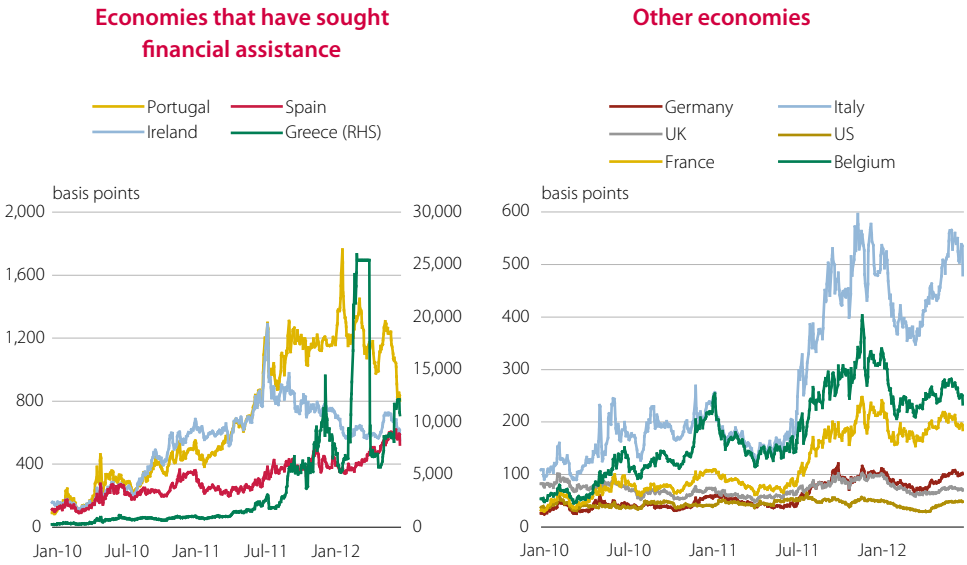
1 Monthly average of daily data. Data to 29 June.

Sovereign risk premiums held relatively steady in the year's opening months, then began pulling higher halfway through March as a new wave of instability gripped European sovereign debt markets. Towards the end of June, spreads initiated a narrowing movement, which was intensified after the European summit, though at the close of this report they remained wide by historical standards (see figure 5). Indicators of the spillover effects between European sovereign CDS show that the common systemic risk factor in these markets, which may in part be capturing the Greek CDS, continues to run high (see figure 6).

At end-June, the sovereign spreads (based on CDS) of the European economies that had not sought EU financial assistance were still very wide, albeit less so than in November 2011. In particular, the credit spreads of Italy, Belgium and France stood at 480 bp, 234 bp and 185 bp respectively (see right-hand panel of figure 5) against 525 bp for Spain, 554 bp for Ireland and upwards of 800 bp for Portugal (see left-hand panel of figure 5).

Sovereign credit spreads (five-year CDS)

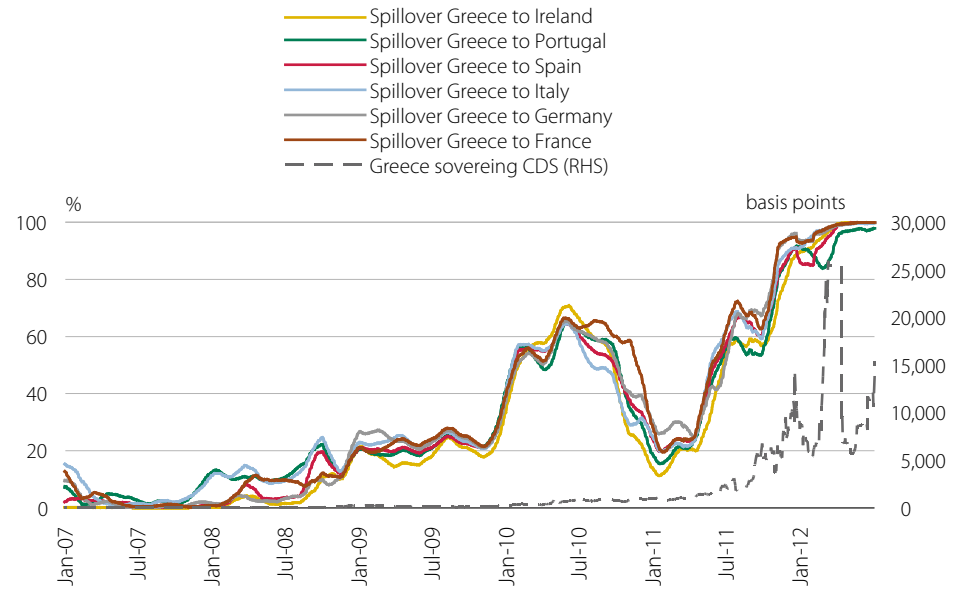
FIGURE 5



Source: Thomson Datastream. Data to 29 June.

Greek debt and systemic risk in European sovereign debt markets

FIGURE 6

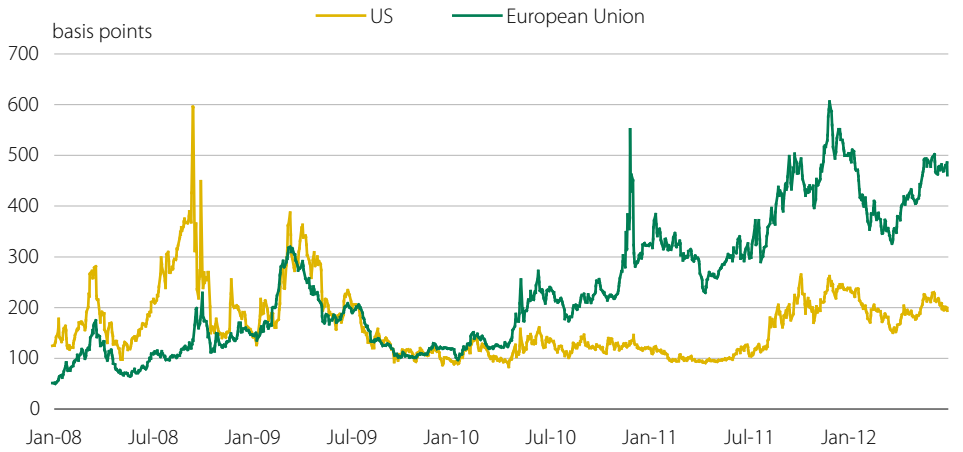


Source: CNMV. The figure shows the percentage of variance in the CDS spreads of various European countries that is not ascribable to historical information but to contemporaneous shocks in Greece's credit risk. The resulting contagion indicator is increasing with the intensity of the effect produced by specific shocks in Greek sovereign spreads. Data to 29 June.

Proof that part of the recent stress on sovereign debt markets springs from concerns about the stability of Europe's – particularly Spain's – financial sector is the dramatic widening of bank credit spreads to a mid-year EU average of just under 500 bp (see figure 7). The credit spreads of US banks have also been widening since mid-March, albeit far less steeply, and by June were up to 200 bp, still far from the 600 bp of year-end 2008.

Bank sector credit spreads (five-year CDS)

FIGURE 7



Source: Thomson Datastream, indices drawn up by CMA. Data to 29 June.

Private corporate bond spreads, which had narrowed considerably in the first quarter, especially in the euro area, began trending higher as of March, with poorer quality borrowers faring worst (see table 5). The spreads observed were nonetheless well below the peak levels of end-2008 and, as we can see from figure 8, net debt issuance held up satisfactorily.

Corporate bond risk premiums[1]

TABLE 5

Spread versus ten-year government bonds, basis points

	Dec 08	Dec 09	Dec 10	Dec 11	Sep 11	Dec 11	Mar 12	Jun 12
Euro area								
High yield	2,181	714	462	739	703	739	536	643
BBB	621	242	170	287	291	287	159	173
AAA	160	28	14	-22	-12	-22	-84	-124
United States								
High yield	1,923	582	461	683	692	683	546	642
BBB	737	189	145	261	240	261	195	244
AAA	315	51	37	98	79	98	30	46

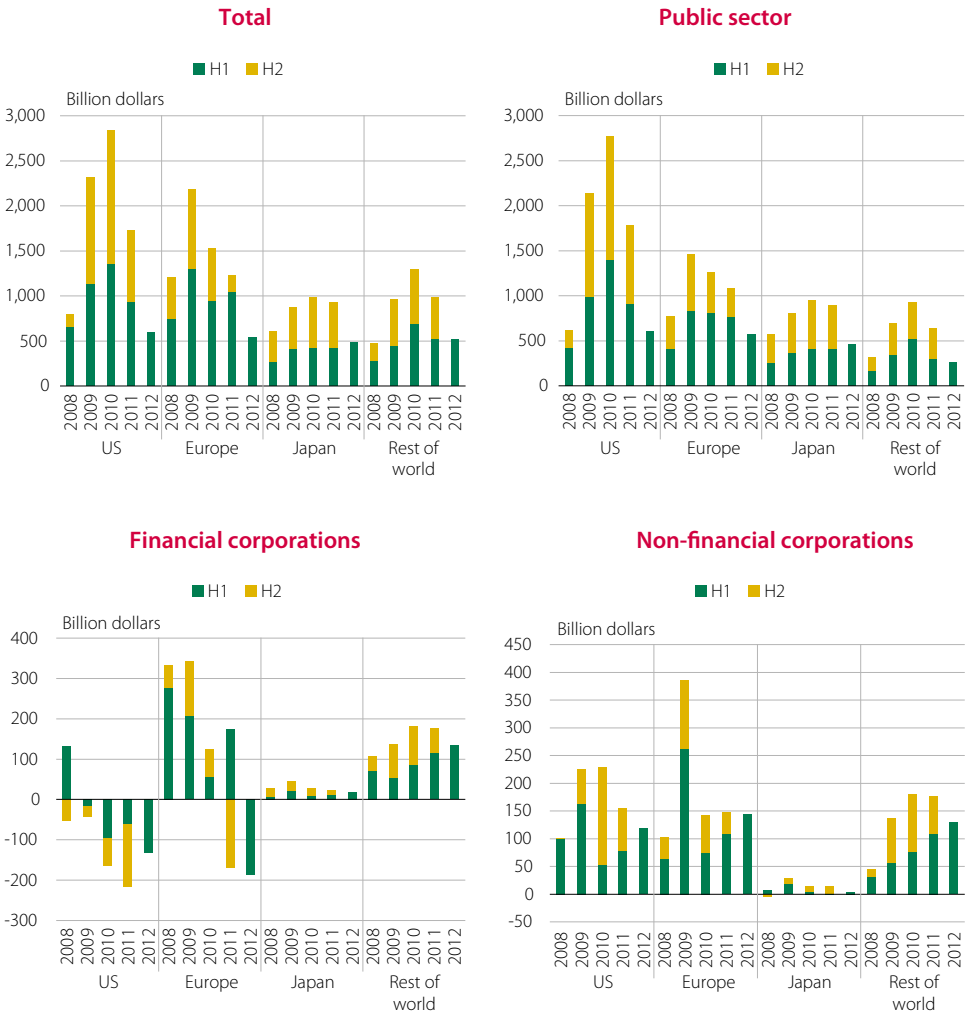
Source: Thomson Datastream.

1 Monthly average of daily data. Data to 29 June.

Net international issuance in the first half of 2012 was characterised by sharp variations among countries and, above all, types of borrower. In all, the net volume issued came to 2.1 trillion dollars, 27% less than in first-half 2011, with both the United States and Europe sharing in the decline. Despite considerable scaling back, the public sector was once again the largest issuer. Net debt financing by the banks was negative in both the United States and Europe. In the United States, issuance has held in negative terrain since the second half of 2008, while in Europe the trend dates to the second half of 2011 and the flare-up of debt market tensions in the

region. Conversely, non-financial corporations in all main geographical areas stepped up issuance versus the same period last year (see figure 8).

Net international debt issuance FIGURE 8



Source: Dealogic. Six-monthly data.

2.4 International stock markets

International stock markets started out bullish and subsequently lost steam. In the first quarter, a brief respite in the tensions on Europe's debt markets and the presentiment that the world growth slowdown might be less severe than recent forecasts suggested, ushered in strong gains on leading stock indices, especially in the United States, Japan and, within Europe, Germany. In some cases, the quarterly advance ran to almost 20% (see table 6).

But spring arrived, and the uptrend was cut short by a new round of European debt market turbulence fuelled by concerns about the outcome of the Greek elections, finally held in mid-June, and about the real state of health of the Spanish financial system. Indices rallied a little in June with help in the closing days from the decisions of the European summit, but not enough to recover the ground lost. Finally,

US indices fell between 2.5% and 5.1% in the second quarter, Japanese indices by around 10% and European indices by between 4.7% and 11.3%.

Year to date, US markets performed the strongest, with gains ranging from the 5.4% of the Dow Jones to the 12.7% of the Nasdaq composite. In Japan, stock indices managed an approximately 6% advance to the end of June, while European markets fared unevenly with outcomes ranging from the -17.1% of the Ibex 35 to the 8.8% of Germany's Dax 30 index.

Performance of main world indices[1] (%)

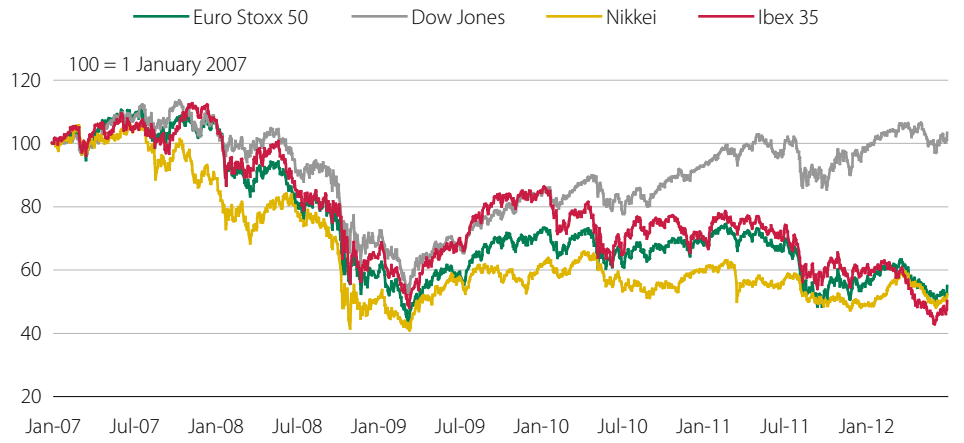
TABLE 6

								Q2 12	
	2008	2009	2010	2011	Q3 11	Q4 11	Q1 12	% prior qt.	% Dec 11
World									
MSCI World	-42.1	27.0	9.6	-7.6	-17.1	7.1	10.9	-5.8	4.5
Euro area									
Euro Stoxx 50	-44.4	21.1	-5.8	-17.1	-23.5	6.3	6.9	-8.6	-2.2
Euronext 100	-45.2	25.5	1.0	-14.2	-20.6	6.0	8.3	-4.7	3.2
Dax 30	-40.4	23.8	16.1	-14.7	-25.4	7.2	17.8	-7.6	8.8
Cac 40	-42.7	22.3	-3.3	-17.0	-25.1	6.0	8.4	-6.6	1.2
Mib 30	-48.7	20.7	-8.7	-24.0	-23.8	1.0	7.9	-11.3	-4.2
Ibex 35	*-39.4*	*29.8*	*-17.4*	*-13.1*	*-17.5*	*0.2*	*-6.5*	*-11.3*	*-17.1*
United Kingdom									
FTSE 100	-31.3	22.1	9.0	-5.6-	-13.7	8.7	3.5	-3.4	0.0
United States									
Dow Jones	-33.8	18.8	11.0	5.5	-12.1	12.0	8.1	-2.5	5.4
S&P 500	-38.5	23.5	12.8	0.0	-14.3	11.2	12.0	-3.3	8.3
Nasdaq-Cpte	-40.5	43.9	16.9	-1.8	-12.9	7.9	18.7	-5.1	12.7
Japan									
Nikkei 225	-42.1	19.0	-3.0	-17.3	-11.4	-2.8	19.3	-10.7	6.5
Topix	-41.8	5.6	-1.0	-18.9	-10.4	-4.3	17.3	-9.9	5.7

Source: Datastream.

1 In local currency. Data to 29 June.

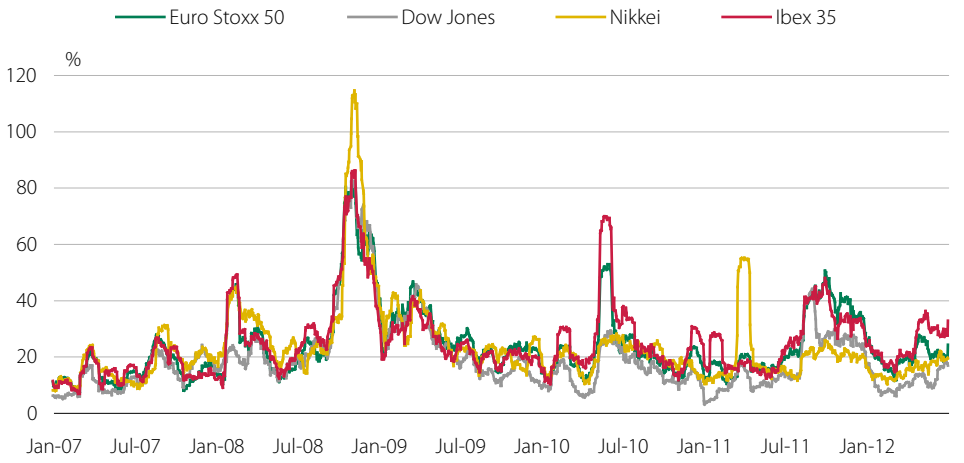
Performance of main world indices FIGURE 9



Source: Thomson Datastream. Data to 29 June.

Volatility has tended to edge higher year to date, though without straying far from 20% in the majority of cases, in line with the historical average for this variable (see figure 10).

Historical volatility of main stock indices FIGURE 10



Source: Thomson Datastream. Data to 29 June.

After a first-quarter dip, the dividend yield of leading world indices returned to more or less the levels of December 2011. US and Japanese indices continued to trail by this measure (see table 7) with yields bordering on 2.6%, while yields in Europe ranged from the 4.3% of the UK's FTSE 100 and the German Dax 30 to the 8.7% of the Ibex 35.

Dividend yield of main stock indices (%)

TABLE 7

	2007	2008	2009	2010	2011	Sep 11	Dec 11	Mar 12	Jun 12
S&P 500	2.2	3.5	2.3	2.2	2.6	2.8	2.6	2.4	2.6
Topix	1.5	2.7	1.8	1.9	2.6	2.4	2.6	2.2	2.6
Euro Stoxx 50	3.7	7.5	4.2	4.8	6.3	7.3	6.3	5.8	6.4
Euronext 100	3.8	7.9	4.2	4.3	5.6	6.4	5.6	5.2	5.6
FTSE 100	3.9	5.8	3.7	3.8	4.1	4.2	4.1	4.0	4.3
Dax 30	2.5	5.4	3.5	2.9	4.2	4.2	4.2	3.6	4.3
Cac 40	4.3	8.1	5.0	5.2	7.0	8.0	7.0	6.2	6.8
Mib 30	3.8	8.6	3.4	3.8	5.4	5.6	5.4	4.6	5.0
Ibex 35	3.1	6.2	3.9	5.9	6.9	8.7	6.9	7.3	8.7

Source: Thomson Datastream. Data to 29 June.

The price-earnings ratios (P/E) of main international indices trended higher in the opening months as stock prices rose. At end-March, ratios were running ahead of 13 times on US and Japanese indices and at around 10 times in Europe. The price falls of the second quarter trimmed points from the ratio, above all in Europe and Japan. By mid-year P/Es in Europe ranged from the 8.5 of the Euro Stoxx 50 and 9.6 of the FTSE 100, a little behind the levels of the US and Japan (see table 8). Note that from a long-term perspective, today's P/Es remain relatively low (see figure 11).

P/E[1] of main stock indices

TABLE 8

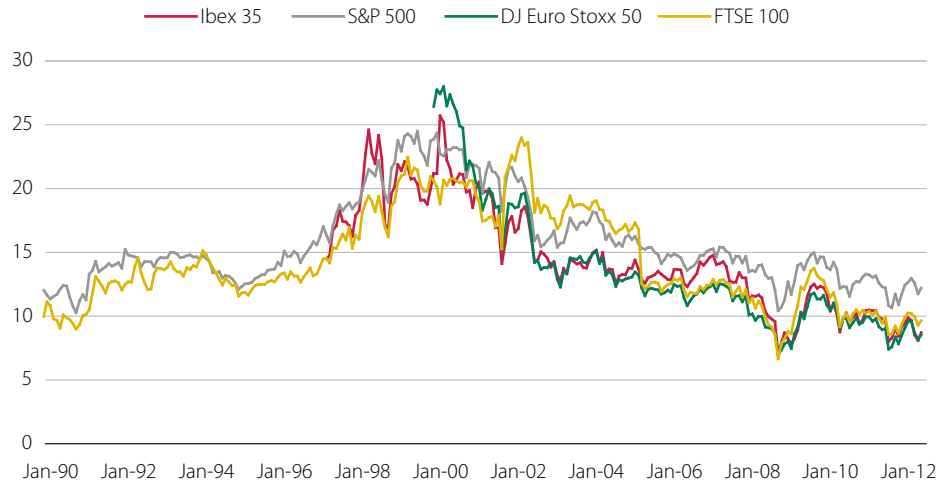
	2007	2008	2009	2010	2011	Sep 11	Dec 11	Mar 12	Jun 12
S&P 500	14.7	11.3	14.6	13.1	11.7	10.7	11.7	13.0	12.2
Topix	15.1	15.6	19.3	13.6	11.6	11.4	11.6	13.5	10.9
Euro Stoxx 50	11.6	7.8	11.5	9.5	8.5	7.6	8.5	9.6	8.5
Euronext 100	12.3	8.3	12.7	10.6	9.4	8.6	9.4	10.7	9.5
FTSE 100	12.1	8.3	12.5	10.5	9.3	8.6	9.3	10.2	9.6
Dax 30	12.3	8.8	12.7	10.8	9.0	8.1	9.0	10.6	8.9
Cac 40	11.8	8.0	12.1	10.0	8.7	7.8	8.7	9.9	8.8
Mib 30	11.5	7.6	12.4	10.0	8.4	7.7	8.4	9.7	7.9
Ibex 35	13.0	8.7	12.3	9.7	9.2	8.3	9.2	9.7	8.7

Source: Thomson Datastream. Data to 15 June.

1 The earnings per share making up the ratio denominator is based on 12-month forecasts.

P/E[1] of main stock indices

FIGURE 11



Source: Thomson Datastream. Data for the last trading session in each month. Data to 29 June.

1 The earnings per share making up the ratio denominator is based on 12-month forecasts.

Performance of other leading world indices

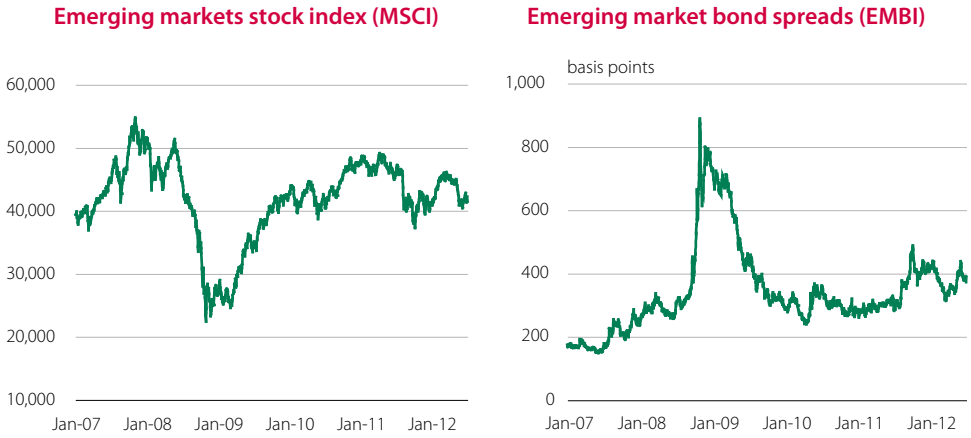
TABLE 9

									Q2 12	
	Index	2008	2009	2010	2011	Q3 11	Q4 11	Q1 12	% prior qt.	% Dec 11
Latin America										
Argentina	Merval	-49.8	115.0	51.8	-30.1	-26.7	0.0	9.0	-12.6	-4.7
Brazil	Bovespa	-41.2	82.7	1.0	-18.1	-16.2	8.5	13.7	-15.7	-4.2
Chile	IGPA	-19.6	46.9	38.2	-12.4	-17.0	7.1	10.3	-5.1	4.7
Mexico	IPC	-24.2	43.5	20.0	-3.8	-8.4	10.7	6.6	1.7	8.4
Peru	IGRA	-59.8	99.2	66.4	-16.7	-2.9	6.2	21.3	-14.4	3.8
Venezuela	IBC	-7.4	57.0	18.6	79.1	23.9	17.5	70.6	26.1	115.2
Asia										
China	Shanghai Comp.	-65.4	80.0	-14.3	-21.7	-14.6	-6.8	2.9	-1.7	1.2
India	BSE	-55.3	85.0	15.7	-25.7	-12.1	-8.0	15.6	-0.7	14.8
South Korea	Korea Cmp. Ex	-40.7	49.7	21.9	-11.0	-15.8	3.2	10.3	-7.9	1.5
Philippines	Manila Comp.	-48.3	63.0	37.6	4.1	-6.8	9.3	16.8	2.7	20.0
Hong Kong	Hang Seng	-48.3	52.0	5.3	-20.0	-21.5	4.8	11.5	-5.4	5.5
Indonesia	Yakarta Comp.	-50.6	87.0	46.1	3.2	-8.7	7.7	7.8	-4.0	3.5
Malaysia	Kuala Lumpur Comp.	-39.3	45.2	19.3	0.8	-12.2	10.4	4.3	0.2	4.5
Singapore	SES All-S'Pore	-49.2	64.5	10.1	-17.0	-14.3	-1.1	13.8	-4.4	8.8
Thailand	Bangkok SET	-47.6	63.2	40.6	-0.7	-12.0	11.9	16.7	-2.1	14.3
Taiwan	Taiwan Weighted Pr.	-46.0	78.3	9.6	-21.2	-16.5	-2.1	12.2	-8.0	3.2
Eastern Europe										
Russia	Russian RTS Index	-72.4	128.6	22.5	-21.9	-29.7	3.0	18.5	-17.5	-2.3
Poland	Warsaw G. Index	-51.1	46.9	18.8	-20.8	-21.0	-1.8	9.8	-1.1	8.6
Romania	Romania BET	-70.5	61.7	12.3	-17.7	-21.4	0.2	23.9	-15.7	4.4
Bulgaria	Sofix	-79.7	19.1	-15.2	-11.1	-16.1	-7.2	-4.1	-5.2	-9.0
Hungary	BUX	-53.3	73.4	0.5	-20.4	-30.5	7.6	9.8	-6.9	2.2
Croatia	CROBEX	-67.1	16.4	5.3	-17.6	-16.9	-6.2	5.4	-7.6	-2.7

Source: Thomson Datastream. Data to 29 June.

Emerging stock markets performed broadly in line with their counterparts in the advanced economies over the first half of 2012, with sturdy gains in the opening stretch giving way to losses as the months progressed. Differences were again apparent both within and between regions. Hence emerging Asian markets were the top performers to mid-year, with gains extending to all the indices followed (see table 9). Heading the list were the Philippine, Indian and Thai indices with gains of 20.0%, 14.8% and 14.3% respectively, while the main Chinese index posted a more modest advance (1.2%) amid lesser volatility. Elsewhere, gainers mixed with losers. In Latin America, for instance, the indices of Brazil and Argentina sank 4.7% and 4.2% respectively while the remainder closed in positive terrain. And in Eastern Europe, Bulgaria's Sofix shed 9% of its value in contrast to the Polish index's 8.6% gain.

Risk valuation in emerging economies FIGURE 12



Source: Thomson Datastream and Bloomberg. Data to 29 June.

According to the World Federation of Exchanges (WFE), worldwide stock market trading volumes receded almost 18% between January and May 2012 (after varying by a bare -0.1% in 2011). All major exchanges shared in the decline: in the United States, from the -6.6% of the Nasdaq to the -16.9% of the NYSE; in Europe, from the -14.7% of the LSE to the -23% of the BME; and in Asia, from the -15.5% of the Australian bourse to -35.9% in Shanghai.

Trading volume on main international stock markets TABLE 10

Billion euros

Exchange	2008	2009	2010	2011	Q3 11	Q4 11	Q1 12	Q2 12[4]
United States[1]	48,488	22,451	23,188	21,940	6,471	5,113	4,647	3,418
New York	23,042	12,627	13,553	12,866	3,742	2,985	2,639	1,930
Tokyo	3,816	2,656	2,872	2,831	716	566	723	454
London[2]	4,374	1,270	2,084	2,021	534	410	467	302
Euronext	3,028	1,383	1,533	1,520	421	305	321	221
Deutsche Börse	3,211	1,084	1,237	1,252	362	260	283	172
BME[3]	1,243	886	1,037	925	234	206	177	194

Source: World Federation of Exchanges and CNMV.

1 As of 2009, the sum of the New York Stock Exchange (NYSE), Euronext and Nasdaq OMX; previously the New York Stock Exchange, Nasdaq and the American Stock Exchange.

2 Incorporating Borsa Italiana as of 2010.

3 Bolsas y Mercados Españoles. Not including Latibex.

4 Data corresponding to April and May, except BME, up to 29 June.

3 Spanish markets

3.1 Fixed-income markets

After the first-quarter respite brought by the ECB's long-term refinancing operations, domestic fixed-income markets came under renewed pressure as the sovereign debt crisis flared up once more. The trigger this time was the uncertain prospects for Greece in the run-up to elections, and the result was a strong surge in government and corporate bond yields and credit spreads. Tighter financing conditions brought particular problems for financial institutions and the public sector of the economy, reflecting the credit risk contagion effect whereby banks and sovereigns progressively stifle each other. In the last days of June, Spanish bond yields eased back slightly, helped in part by the agreements reached at the European Council.

Spanish treasury bill yields pulled higher in the second quarter after the falls of the first few months, with six- and twelve-month instruments rising fastest. Between March and June, yields on three-month Letras del Tesoro added 82 bp to 1.20%, while those on six- and twelve-month Letras del Tesoro climbed by 189 bp and 267 bp respectively as far as 2.53% and 4.09%. Except in the twelve-month tenor, short-term treasury yields were lower at mid-year than at the 2011 close (see table 11).

Short-term interest rates[1] (%)

TABLE 11

	Dec 09	Dec 10	Dec 11	Sep 11	Dec 11	Mar 12	Jun 12
Letras del Tesoro							
3 month	0.41	1.60	2.20	1.48	2.20	0.38	1.20
6 month	0.65	2.71	3.47	2.41	3.47	0.64	2.53
12 month	0.88	3.09	3.27	3.21	3.27	1.33	4.09
Commercial paper[2]							
3 month	0.76	1.37	2.74	1.76	2.74	2.49	2.69
6 month	1.25	2.52	3.52	3.21	3.52	3.21	3.40
12 month	1.63	3.04	3.77	3.52	3.77	3.55	3.64

Source: Thomson Datastream and CNMV. Data to 29 June.

1 Average daily data.

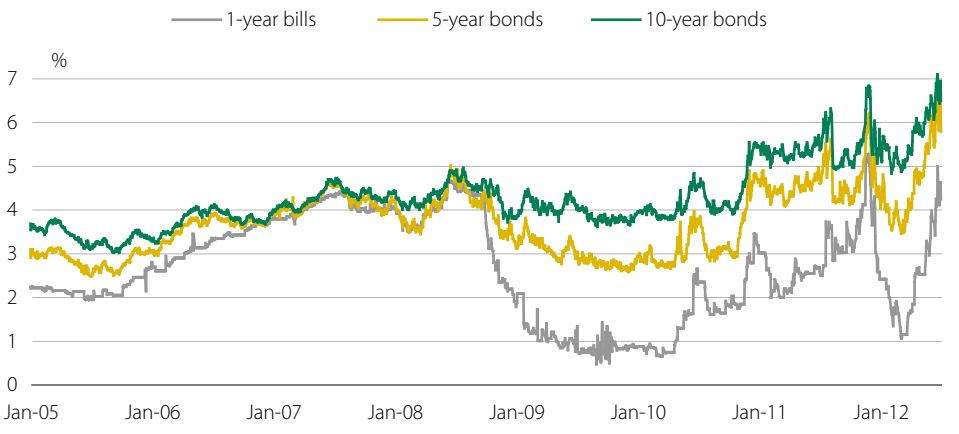
2 Interest rates at issue.

Movements in commercial paper traced a similar but smoother course than short-term sovereign instruments, with falling yields in the first quarter giving way to rises as of March. Specifically, interest rates on three-, six- and twelve-month paper closed the first-half period at 2.7%, 3.4% and 3.6% respectively.

Long-term government bond yields rose faster than those of shorter-dated treasuries throughout the second quarter. This increase, moreover, wiped out the first-quarter reductions facilitated by the ECB's two special refinancing operations. By end-June, the average monthly yields on three-, five- and ten-year bonds were up to 5.4%, 6.1% and 6.6% respectively, their highest levels since 1999 and also substantially ahead of the levels of December 2011 (4%, 4.7% and 5.5% respectively).

Spanish government debt yields[1]

FIGURE 13

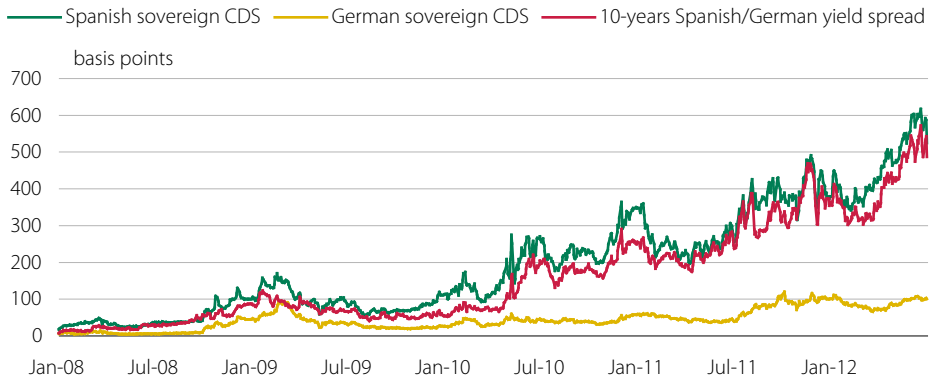


Source: Thomson Datastream. Data to 29 June.

After the relative calm of the opening quarter accompanied by lower heading yields, Spain's sovereign risk premium, measured as the yield spread of ten-year government bonds over the equivalent German benchmark, raced upwards in the second

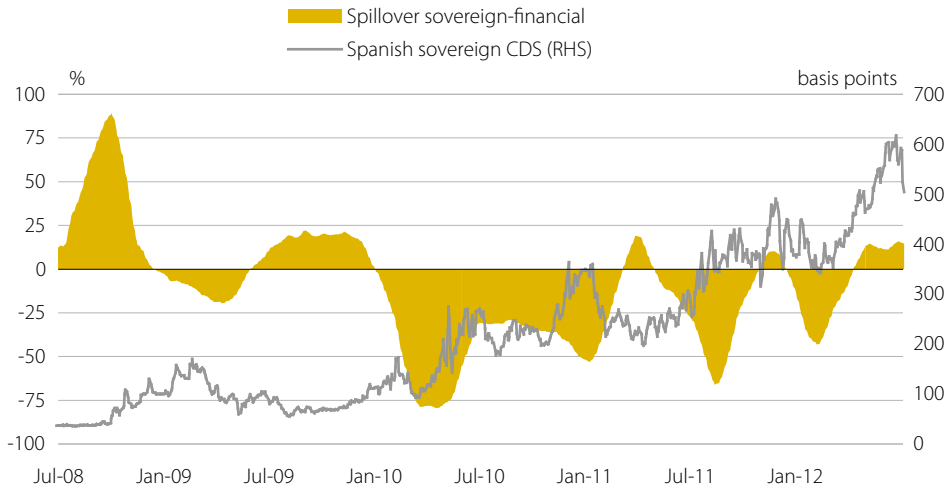
quarter as far as a mid-June high of over 570 bp[4] (see figure 14). The increase moreover was steeper than in any other euro-area economy, reflecting spillover from the banking to the public sector (figure 15). By the end of June, the sovereign spread had moderated to 487 bp.

Risk premium of Spanish government debt FIGURE 14



Source: Thomson Datastream. Data to 29 June.

Spillover between the financial and public sector in Spain[1] FIGURE 15



Source: CNMV.

1 The figure shows the percentage of variance in the Spanish banking sector CDS average and the Spanish sovereign CDS that is not attributable to their historical information but to contemporaneous shocks on returns of both. The indicator is increasing with the intensity of the impact of specific financial sector risk shocks on the sovereign sector.

Long corporate bond yields rose sharply in the second quarter, especially in the longest maturities, reversing the decline of the previous quarter. By mid-year, three-, five- and ten-year instruments were trading at 5.8%, 6.8% and 12.3% respectively (see table 12).

4 These persistently high sovereign spreads caused one of Europe's leading CCPs, LCH Clearnet, to raise its margin requirements on banks using Spanish government debt as collateral to secure short-term funding.

Medium and long corporate bond yields[1] (%)

TABLE 12

	Dec 09	Dec 10	Dec 11	Sep 11	Dec 11	Mar 12	Jun 12
Private fixed income							
3 year	3.14	4.31	5.63	4.98	5.63	3.77	5.82
5 year	4.30	5.44	6.35	5.63	6.35	4.86	6.79
10 year	4.88	6.42	9.24	7.25	9.24	8.14	12.27

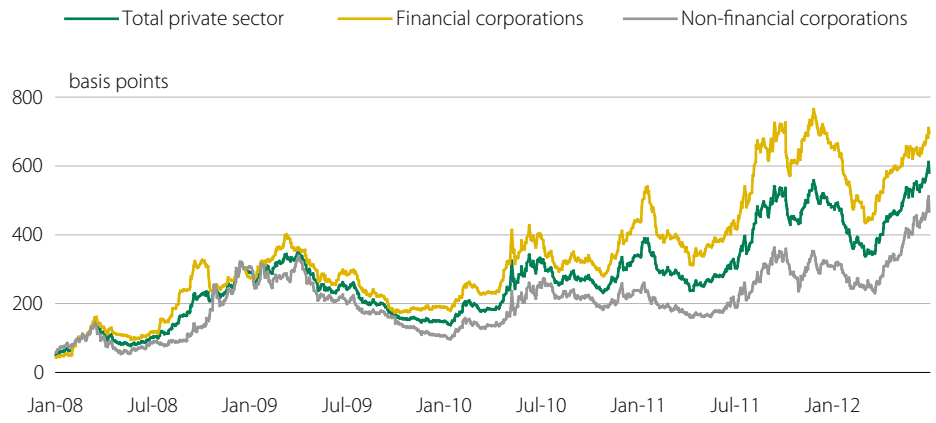
Source: Reuters and CNMV. Data to 29 June.

1 Monthly average of daily data.

The credit spreads of Spanish private-sector issuers have tended to mirror the progress of sovereign risk premiums, with first-quarter falls followed by a swift rebound from March on. As we can see from figure 16, the average CDS spreads of Spanish financial issuers were trading near 700 bp at the end of June, not far from the 740 bp peak of November 2011. Meantime, the average spreads of non-financial corporations widened gradually after their initial narrowing movement to close June at highs bordering on 470 bp.

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

FIGURE 16



Source: Thomson Datastream and CNMV. Data to 29 June.

1 Simple average.

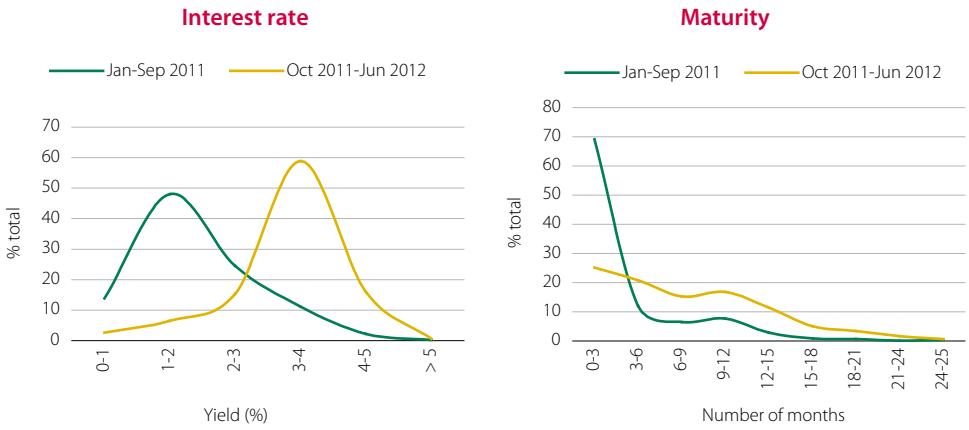
The volume of private fixed-income issues registered with the CNMV summed 207.60 billion euros in the first six months of 2012, a 51.5% increase over the same period last year (see table 13). Non-financial corporations stepped up their activity in fixed-income markets, to the extent of doubling their issuance versus full-year 2011 to 1.28 billion euros. Commercial paper was again the most popular instrument with this kind of issuer followed by bonds.

Financial corporations were also active participants, with a preference for non-convertible bonds backed by state guarantee, alongside commercial paper and, in smaller measure, covered bonds; mainly mortgage bonds. Increased issuance under these three heads contrasted with their dwindling recourse to asset-backed securities.

The prolongation of the sovereign debt crisis, alongside banks' funding needs and constraints on their access to capital markets, steered them towards the instruments eligible as collateral in the long-term refinancing operation held by the ECB in February last. This explains the upswing in issuance of guaranteed and covered bonds (see figure 18). At the same time, banks have been stepping up commercial paper sales through their branch networks since the last quarter of 2011.

The result was that commercial paper raised its weight in the fixed-income issuance mix by 4 percentage points to 39%, equating to 80.96 billion euros. Financial corporation sales of these instruments, moreover, were at increasingly higher interest rates and longer maturities (see figure 17).

Interest rates and maturities of financial corporation commercial paper issues FIGURE 17



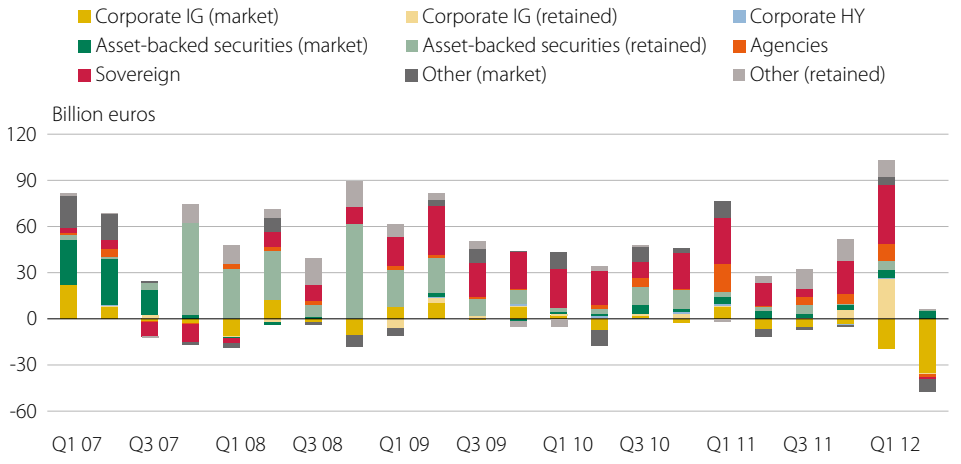
Source: CNMV. Data to 15 June.

Mortgage covered bonds displaced asset-backed securities as the second instrument in the first-half mix, with issue volumes up by 55% year-on-year to 59.35 billion euros or 28.6% of the total. Issuance of asset-backed securities, at 10.73 billion, was 72% down on the year-ago period and accounted for 5.2% of the first-half total (27.5% in 2011). Meantime, bonds backed by loans to public agencies, known as territorial covered bonds, retained their 3.5% share with first-half sales summing 7.30 billion euros.

Net long-term debt issuance in Spain[1]

FIGURE 18

By type of instrument[2]



Source: Dealogic and CNMV. Data to 29 June 2012.

1 The "Other" category includes covered bonds, preference shares and other long-term debt securities. IG: Investment Grade, HY: High Yield.

2 The "Agencies" category includes the issues of the Instituto de Crédito Oficial, Instituto Catalán de Finanzas, Instituto Valenciano de Finanzas, Fondo de Reestructuración Ordenada Bancaria, Fondo de Amortización del Déficit Eléctrico and Corporación de Reservas Estratégicas de Productos Petrolíferos.

Non-convertible bonds issues reached 46.54 billion euros in the first half of 2012, 22.4% of issuance and more than double the total of 2011 (20.19 billion). Growth here reflects keen issuance activity among banks in state-guaranteed securities, which accounted for 92% of non-convertible bonds issued in the period, especially in the days preceding the ECB's February tender.

Among fixed-income instruments qualifying as regulatory capital, we can cite the contrasting fortunes of compulsorily convertible bonds and preference shares. In the first half of 2012, issues of compulsorily convertible bonds rose 25% year-on-year to 2.72 billion euros, though without rivalling the flurry of activity of last year's closing quarter (4.94 billion) as banks moved to anticipate the tougher capital requirements sought by national and European authorities. Conversely, preference share issues have dried up altogether, presumably because their loss-absorbing capacity will be curtailed under the new legislation known as Basel III.

Foreign debt financing by domestic banks summed over 41.5 billion euros to the month of April, 34% less than in the same four months of 2011. Issuers retained their preference for longer maturities, with over 24.50 billion sold (59% of the total versus 43% in 2011) against the just over 17 billion raised via shorter-dated instruments (see table 13).

Gross fixed-income issues

TABLE 13

Filed[1] with the CNMV	2009	2010	2011	2011 Q1 11	2011 Q2 11	2011 Q3 11	2011 Q4 11	2012 Q1 12	2012 Q2 12[2]
FACE VALUE (million euros)	**387,476**	**226,449**	**288,992**	**77,161**	**59,900**	**38,435**	**113,496**	**120,740**	**86,856**
Mortgage covered bonds	35,574	34,378	67,227	19,254	18,980	5,250	23,743	26,000	33,350
Territorial covered bonds	500	5,900	22,334	2,935	1,800	7,437	10,162	3,200	4,100
Non-convertible bonds and debentures	62,249	24,356	20,192	2,578	3,320	981	13,312	31,305	15,231
Convertible/exchangeable bonds and debentures	3,200	968	7,126	682	1,500	0	4,944	1,128	1,592
Asset-backed securities	81,651	63,261	68,413	26,585	11,168	10,449	20,210	9,195	1,535
Domestic tranche	77,289	62,743	62,796	23,706	10,130	10,116	18,844	7,810	1,535
International tranche	4,362	518	5,617	2,879	1,038	334	1,366	1,385	0
Commercial paper[3]	191,342	97,586	103,501	24,928	23,131	14,317	41,125	49,911	31,048
Securitised	4,758	5,057	2,366	546	913	259	648	616	500
Other	186,583	92,529	101,135	24,382	22,218	14,058	40,477	49,295	30,548
Other fixed-income issues	0	0	0	0	0	0	0	0	0
Preference shares	12,960	0	200	200	0	0	0	0	0
Pro memoria:									
Subordinated debt issues	20,989	9,154	29,277	5,408	2,998	4,664	16,208	2,772	1,788
Underwritten issues	4,794	299	10	10	0	0	0	0	0

Abroad by Spanish issuers	2009	2010	2011	2011 Q1 11	2011 Q2 11	2011 Q3 11	2011 Q4 11	2012 Q1 12	2012 Q2 12[4]
FACE VALUE (million euros)	**2009**	**2010**	**2011**	**Q1 11**	**Q2 11**	**Q3 11**	**Q4 11**	**Q1 12**	**Q2 12[4]**
Long term	47,230	51,107	51,365	21,513	14,020	3,697	12,135	23,065	1,476
Preference shares	3,765	0	0	0	0	0	0	0	0
Subordinated debt	2,061	0	242	0	0	0	242	0	0
Bonds and debentures	41,404	50,807	51,123	21,513	14,020	3,697	11,892	23,065	1,476
Asset-backed securities	0	300	0	0	0	0	0	0	0
Short term	102,456	76,624	68,677	26,637	20,308	10,241	11,492	14,458	2,561
Commercial paper	102,456	76,624	68,677	26,637	20,308	10,241	11,492	14,458	2,561
Securitised	108	248	322	97	75	36	114	0	0
Total	**149,686**	**127,731**	**120,043**	**48,150**	**34,328**	**13,938**	**23,627**	**37,524**	**4,037**

Source: CNMV and Bank of Spain.

1 Including those admitted to trading without an issue prospectus.

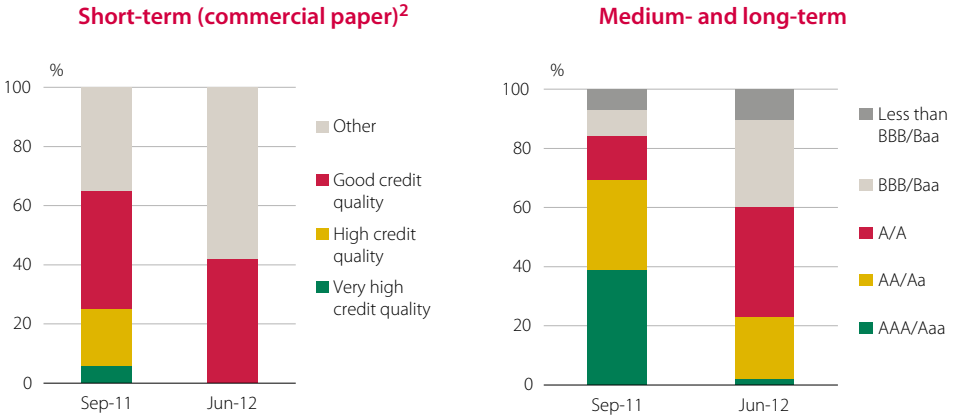
2 Data to 29 June 2012.

3 Figures for commercial paper issuance correspond to the amounts placed.

4 Available data to 30 April, 2012.

It bears mention that the credit quality of the debt issued by the Spanish private sector has markedly deteriorated in the last few quarters, in line with the downgrades imposed by leading credit rating agencies[5] on Kingdom of Spain debt. As we can see from figure 19, prime or high-rated issues of short-term debt, which came to 25% of the total in September 2011, had disappeared entirely by mid-year 2012. In longer maturities, the relative weight of the highest-rated debt was also sharply down. Specifically, the percentage of debt in the AAA and AA categories sank from 39% to 2% and 31% to 21% respectively. Conversely, A-rated debt advanced from 15% to 37% of the total, while the lowest quality debt (BBB) within the investment grade category scaled up from 9% to 30%. The percentage of debt rated below BBB, i.e., speculative grade, rose 7% to 10%.

Credit ratings of Spanish corporate debt[1] FIGURE 19



Source: Thomson Reuters, Bloomberg and CNMV.

1 Outstanding balance of debt instruments quoted on the AIAF market.

2 Very high: A-1+, F1+ or P-1 from S&P, Fitch and Moody's respectively. High: A-1 or F1 from S&P and Fitch. Good: A-2, F2 or P-2 from S&P, Fitch and Moody's. Other: lower rated or unrated issues.

3.2 Equity markets

3.2.1 Prices

A subdued growth outlook and the flare-up in the sovereign debt crisis, compounded by doubts about the scale of the Spanish bank sector's capital shortfall, weighed heavily on domestic equity markets, above all in the second quarter. The Ibex 35 fell 6.5% and 11.3% in the first and second quarter respectively, for a year-to-date decline of 17.1%, deeper than any other European benchmark index (see tables 6 and 14). After a mid-June low quoting at the levels of March 2003, and below those of March 2009, the Ibex managed a small rally in the closing days of the month (see figure 20).

5 In the course of this year, Spain's long-term sovereign debt was revised down from A to BBB+ by S&P on 27 April (after a 16 January downgrade by the same agency from AA- to A), from A to BBB by Fitch on 7 June (revised down from AA- to A on 27 January) and from A3 to Baa3 by Moody's on 14 June (A1 to A3 on 14 February). Short-term sovereign debt was revised down from A-1 to A-2 by S&P, likewise on 27 April (down from A-1+ to A-1 on 23 March), from F1 to F2 by Fitch on 7 June (F1+ to F1 on 27 January) and from P-2 to P-3 by Moody's on 14 June (P-1 to P-2 on 14 February).

Performance of Spanish stock indices (%)

TABLE 14

	2008	2009	2010	2011	Q3 11[1]	Q4 11[1]	Q1 12[1]	Q2 12		
								% prior qt.	% Dec 11	% y/y
Ibex 35	-39.4	29.8	-17.4	-13.1	-17.5	0.2	-6.5	-11.3	-17.1	-30.0
Madrid	-40.6	27.2	-19.2	-14.6	-17.8	-0.6	-5.9	-11.0	-16.2	-30.1
Ibex Medium Cap	-46.5	13.8	-5.6	-20.7	-20.6	1.0	8.0	-10.0	-2.8	-20.1
Ibex Small Cap	-57.3	17.6	-18.3	-25.1	-23.3	-9.4	-10.3	-19.3	-27.6	-49.0
FTSE Latibex All-Share	-51.8	97.2	9.0	-23.3	-18.9	8.6	5.7	-11.7	-6.6	-17.5
FTSE Latibex Top	-44.7	79.3	9.7	-17.1	-15.6	11.2	10.1	-7.7	1.6	-4.1

Source: Thomson Datastream.

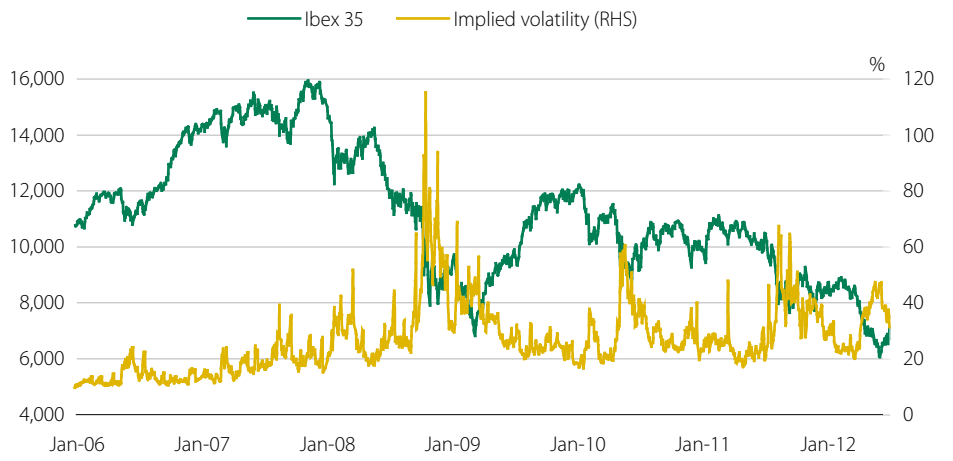
1 Change vs. previous quarter.

Of the smaller cap indices, the Ibex Medium Cap outperformed both the Ibex 35 and the Ibex Small Cap, with a first-quarter advance of 8% and second-quarter fall of 10% leaving it 2.8% down vs. the year's outset (-20.7% in 2011). The Ibex Small Cap was the worst performing domestic index in the first-half period, with 28% losses deeper even than the price slide of 2011 (-25.1%). Latin American indices dropped between 7.7% and 11.7% from March to June, in a break with the rising trend of the two preceding quarters. Year to date, the FTSE Latibex All-Share has fallen 6.6%, while the FTSE Latibex-Top scraped an increase of 1.6% (see table 14).

The implied volatility of the Ibex 35, after falling steadily since September 2011, swung upwards in the second quarter though without reprising last summer's spike (see figure 20). Volatility readings held below 50% in contrast to the highs testing 70% observed in August 2011 and during the first throes of the Greek debt crisis in the second quarter of 2010. By end-June, Ibex 35 volatility had eased back to around 30%, close to the 25.1% average recorded since 1999.

Ibex 35 performance and implied volatility[1]

FIGURE 20



Source: Thomson Datastream and MEFF. Data to 29 June 2012.

1 Implied at-the-money (ATM) volatility on nearest expiry.

All sectors of the Madrid General Index (IGBM), with the exception of consumer goods, posted deeper losses in the second quarter (see table 15), with falls ranging from -11.7% to -17.9% against the -7% to -13% of the first three months. The heaviest losses were in oil and energy (-17.9% vs. -12.6% in the first quarter), followed by technology and telecommunications (-13.2% vs. -6.5%), financial and real estate services (-12.2% vs. -7.7%), consumer services (-12.1% vs. a first-quarter gain of 10.8%) and basic materials, industry and construction (-11.7% vs. -8.5%). Within financial and real estate, the real estate sub-sector underperformed the two preceding quarters with a price slide of -34.7%. Consumer goods was the only sector to close in positive territory, thanks to the price gains of one firm in the textiles, clothing and footwear sub-sector, albeit with a more modest advance of 9.2% compared to the 12.1% of the opening quarter.

Year to date, all sectors prolonged the decline initiated in 2010, except consumer goods with its first-half advance of 22.4%. The steepest falls corresponded to oil and energy (-28,2%), basic materials, industry and construction (-19.2%), financial and real estate services (-18.9%) and technology and telecommunications (-18.9%), while consumer services managed to contain the decline at -2.6%.

Performance of the Madrid Stock Exchange by sector and leading shares[1] (annual %, unless otherwise indicated) TABLE 15

						Q2 12		
	Weighting[2]	2011	Q3 11	Q4 11	Q1 12	% prior qt.	% Dec 11	% y/y
Financial and real estate services	**38.80**	**-18.9**	**-21.5**	**0.2**	**-7.7**	**-12.2**	**-18.9**	**-34.8**
Real estate and others	0.15	-47.5	-38.3	-17.2	-27.1	-34.7	-52.4	-75.5
Banks	36.76	-20.3	-21.9	0.2	-7.9	-11.4	-18.4	-34.8
BBVA	12.18	-8.5	-22.2	8.1	-10.7	-3.6	-13.9	-25.9
Santander	18.70	-23.3	-21.9	-3.8	0.4	-5.7	-5.3	-27.3
Oil and energy	**18.24**	**-2.7**	**-16.7**	**3.8**	**-12.6**	**-17.9**	**-28.2**	**-36.5**
Iberdrola	7.41	-13.9	-15.2	-4.6	-9.3	-12.6	-20.7	-34.9
Repsol YPF	6.46	13.8	-16.5	18.8	-20.7	-29.7	-44.3	-43.0
Basic materials, industry and construction	**7.61**	**-14.3**	**-19.5**	**2.1**	**-8.5**	**-11.7**	**-19.2**	**-31.7**
Construction	4.44	-6.9	-14.4	-0.6	-13.2	-12.2	-23.8	-32.8
Technology and telecommunications	**22.38**	**-20.9**	**-14.7**	**-6.6**	**-6.5**	**-13.2**	**-18.9**	**-34.1**
Telefónica	20.44	-21.1	-14.4	-7.2	-8.2	-13.4	-20.5	-35.5
Consumer goods	**9.09**	**5.7**	**-2.9**	**-0.7**	**12.1**	**9.2**	**22.4**	**18.7**
Inditex	5.87	12.9	2.4	-1.7	13.5	13.5	28.8	29.9
Consumer services	**3.89**	**-24.2**	**-27.9**	**0.6**	**10.8**	**-12.1**	**-2.6**	**-27.9**

Source: Thomson Datastream, Bolsa de Madrid and BME.

1 Shares capitalising at more than 3% of the IGBM, adjusted for free float.

2 Relative weight (%) in the IGBM as of 1 January 2012.

In first-half 2012, price falls at the country's largest telecommunications operator, followed by the top two energy firms and two banking majors, contributed most to the decline in the IGBM (see table 16).

Shares with greatest impact on IGBM change[1]

TABLE 16

		Jun 2012			
		Change (p.p.)		Contribution to change (%)	
Share	**Sector**				
Negative impact		**/prior qt.**	**/Dec 11**	**/prior qt.**	**/Dec 11**
Telefónica	Technology and telecommunications	-2.7	-4.2	26.7	29.8
Repsol	Oil and energy	-1.9	-2.9	18.8	20.4
Banco Santander	Financial and real estate services	-1.1	-1.0	10.5	7.1
Iberdrola	Oil and energy	-0.9	-1.5	9.1	10.9
Bankia	Financial and real estate services	-0.8	-0.9	7.5	6.1
Positive impact					
Inditex	Consumer goods	0.8	1.7	-7.7	-12.1

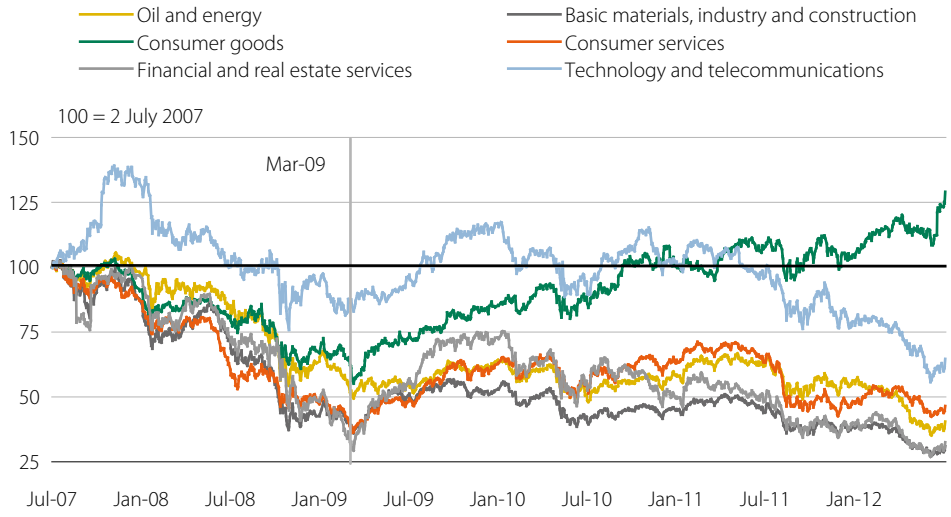
Source: Thomson Datastream and Bolsa de Madrid. Data to 29 June, 2012.

1 The shares listed are those having most impact (equal to or more than 0.15 points in absolute terms) on the quarterly change in the IGBM.

Since the subprime debacle of summer 2007, only one IGBM sector, consumer services, had managed to climb above its pre-crisis levels (see figure 21) by the closing date for this report, while remaining sectors were still trading short by a sizeable margin, or even trailing the record lows of March 2009. The sectors losing most ground since the start of the crisis were basic materials, industry and construction (-69%), followed by financial and real estate services (-67%), oil and energy (-59%) and, to a lesser extent, consumer services (-53%) and technology and telecommunications (-35%). Prices in this last sector had tumbled furthest (-22%) from the low of March 2009 to the closing date for this report, ahead of oil and energy and basic materials, industry and construction with -18% and -14% respectively. Conversely, the consumer goods sector was trading 29% above pre-crisis quotes and 134% above its price low of March 2009.

Performance of IGBM sector indices

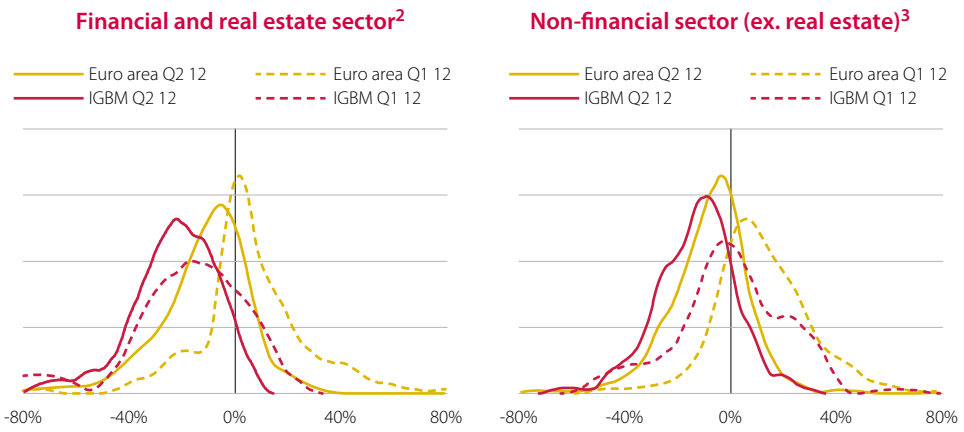
FIGURE 21



Source: Bolsa de Madrid. Data to 29 June 2012.

The distribution of IGBM companies according to second-quarter movements in price, find them overwhelmingly in negative territory. On a split between financial and non-financial corporations, we observe that the former have underperformed, as shown by the pronounced shift to the left of their return distribution between the first and second quarter of the year (left-hand panel of figure 22). Note also that no such shift is observable among their euro-area counterparts.

Distribution of quarterly share returns[1] FIGURE 22



Source: Thomson Datastream.

1 Analysis run on the companies forming each index on 28 June, 2012.

2 The financial and real estate sector comprises credit institutions, insurance undertakings, portfolio and holding companies, other investment service providers and real estate companies according to the ICB classification of Datastream.

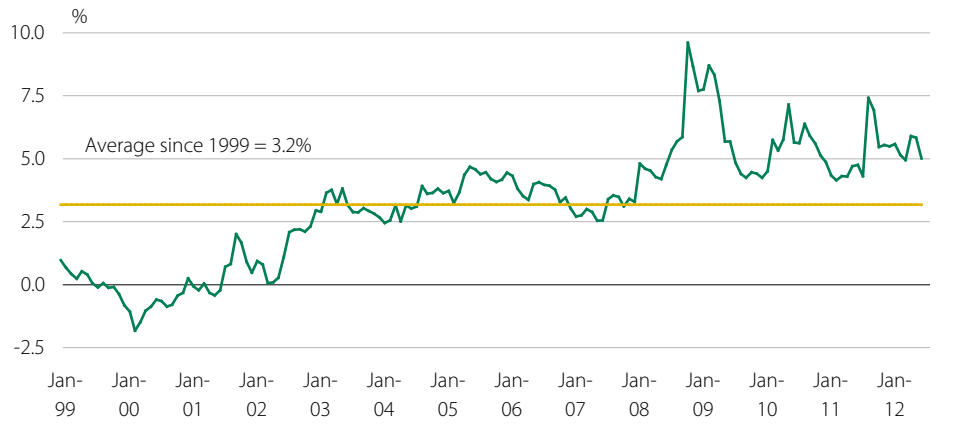
3 The non-financial sector (ex. real estate) comprises listed companies not included in the financial and real estate sector.

After a run-up lasting two quarters, the P/E of the Ibex 35 dropped from 9.7 to 8.7 between March and June 2012. Both the decline and its scale were replicated by the earnings ratios of most developed economy exchanges, which had however risen more in the opening quarter. As a result, the Spanish multiple, which stood in the middle-upper segment of the international P/E range throughout 2011, dropped to the bottom segment in 2012 (see table 8).

The earnings yield gap (indicating the risk premium on equity investment versus long-term government bonds) held relatively flat over the first-half period, with movements in earnings/price largely offset by movements in long-term government yields. The resulting mid-year gap of 5.0% was similar to the 5.3% of end-2011, but sizeably higher than the 3.2% average in place since January 1999 (see figure 23).

Earnings yield gap[1] of the Ibex 35

FIGURE 23



Source: Thomson Datastream.

1 Difference between stock market yield, taken as earnings/price and 10-year bond yields. Monthly data to 29 June 2012.

3.2.2 Trading, issuance and liquidity

Trading on Spanish stock markets shrank by 23.5% versus the year-ago period, a trend carried over from 2011 (see table 17). Average daily volume in the second quarter stood at 3.13 billion euros, improving on the first-quarter figure (2.72 billion) but far behind the average for 2011 (3.62 billion).[6]

Trading volumes on the Spanish stock market

TABLE 17

Million euros

	2009	2010	2011	Q1 11	Q2 11	Q3 11	Q4 11	Q1 12	Q2 12[1]
All exchanges	**886,135**	**1,037,284**	**925,667**	**246,992**	**238,131**	**234,262**	**206,281**	**176,948**	**194,382**
Electronic market	880,544	1,032,447	920,879	245,990	236,897	233,070	204,922	175,640	193,215
Open outcry	73	165	48	20	11	11	7	17	7
of which SICAV[2]	20	8	6	2	3	1	0	0	0
MAB[3]	5,080	4,148	4,380	880	1,134	1,088	1,278	1,218	1,099
Second market	3	3	2	1	0	0	1	0	0
Latibex	435	521	358	102	89	93	73	73	61
Pro memoria: non-resident trading (% all exchanges)									
	64.5	75.2	81.2	77.6	78.7	85.4	81.6	n.a.	n.a.

Source: CNMV and Directorate-General of Trade and Investments.

1 Cumulative data from 1 April to 29 June.

2 Open-ended investment companies.

3 Alternative investment market. Data from the start of trading on 29 May 2006.

n.a.: data not available at the closing date for this report.

Equity issuance on Spanish markets rose 9.3% in year-on-year terms over the first half of 2012 as far as 8.78 billion euros (see table 18). Most of this increase came

6 Average daily trading in 2008, 2009 and 2010 came to 4.89, 3.49 and 4.05 billion euros respectively.

from the conversion to shares of debt instruments issued by the banks, such as compulsorily convertible bonds, preference shares and other subordinated debt securities, for the purpose of reinforcing their regulatory capital.

Equity issuance[1]

TABLE 18

				2011				2012	
	2009	2010	2011	Q1 11	Q2 11	Q3 11	Q4 11	Q1 12	Q2 12[2]
CASH AMOUNT[3] (million euros)	**11,391**	**16,013**	**17,317**	**3,237**	**4,798**	**6,336**	**2,946**	**3,374**	**5,409.2**
Capital increases	11,389	15,407	17,221	3,237	4,798	6,336	2,850	3,374	5,358.6
Of which, IPOs	17	959	6,441	0	3,696	8	2,737	881	1,580.0
Domestic tranche	15	62	6,032	0	3,339	8	2,685	881	1,580.0
International tranche	2	897	410	0	358	0	52	0	0.0
Public offerings	2	606	96	0	0	0	96	0	50.6
Domestic tranche	2	79	95	0	0	0	95	0	50.6
International tranche	0	527	1	0	0	0	1	0	0.0
NUMBER OF FILINGS[4]	**53**	**69**	**92**	**17**	**23**	**26**	**26**	**24**	**26**
Capital increases	53	67	91	17	22	26	26	24	25
Of which, IPOs	2	12	8	0	3	3	2	5	1
Of which, bonus issues	11	15	22	2	5	8	7	2	6
Public offerings	1	3	2	0	1	0	1	0	1
NUMBER OF ISSUERS[4]	**34**	**46**	**46**	**13**	**16**	**22**	**15**	**14**	**15**
Capital increases	34	45	45	13	15	22	15	14	15
Of which, rights offerings	2	12	8	0	3	3	2	5	1
Public offerings	1	2	2	0	1	0	1	0	1

Source: CNMV.

1 Incorporating issues admitted to trading without a prospectus being published.

2 Cumulative data from 1 April to 29 June.

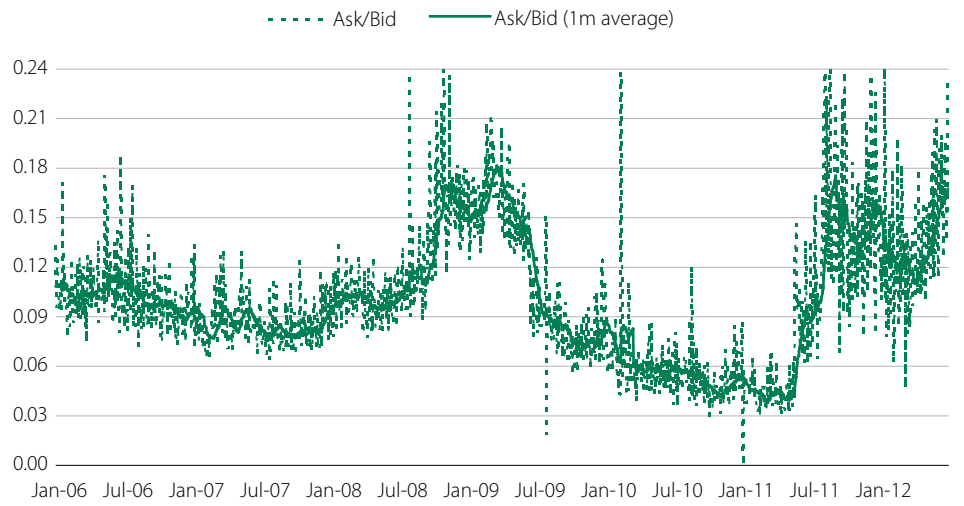
3 Excluding amounts recorded in respect of cancelled transactions.

4 Including all transactions registered, whether or not they eventually went ahead.

Finally, liquidity conditions in the Spanish stock market, which had improved through the first quarter of 2012, deteriorated sharply in the year's middle months. The average bid/ask spread of the Ibex 35 ended June at 0.17%, ahead of the 0.11% of March but close to the readings of end-December 2011. This is nonetheless still above the 0.10% average recorded since 2006 (see figure 24).

Liquidity indicator (bid/ask spread, %) of the Ibex 35

FIGURE 24



Source: Thomson Datastream. Data to 29 June 2012.

II Reports and Analyses

Recent trends in the savings of Spanish households

Mª Isabel Cambón Murcia and Lucio Sanjuán del Peso (*)

(*) Mª Isabel Cambón Murcia and Lucio Sanjuán del Peso belong to the Research, Statistics and Publications Department of the CNMV.

1 Introduction

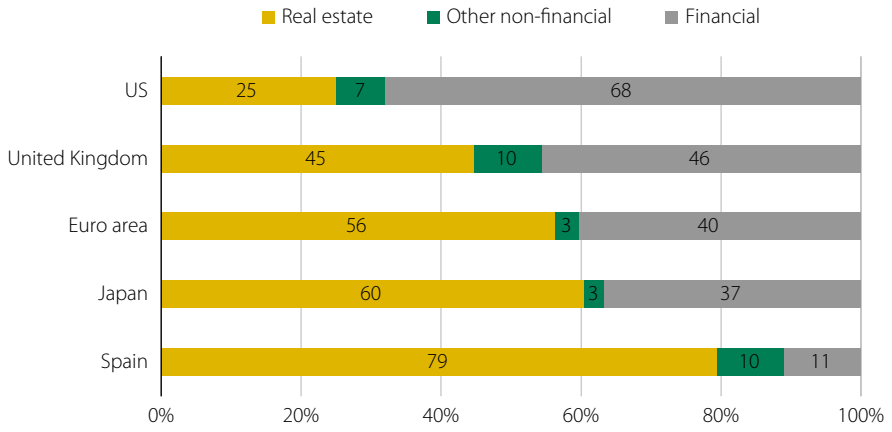
Spanish household savings[1] show significantly different patterns before and after the financial and economic crisis which began in 2007. From the end of the 1990s until the start of the crisis, Spanish households lowered their level of savings from close to 18% of their gross disposable income down to historically low levels of slightly over 10%. During this period, households showed a greater tendency to consumption as a result of the perceived increase in their future income and wealth expectations within the context of a growing macroeconomic environment, a sharp fall in real interest rates and the easy financing conditions progressively offered by the Spanish banking system, which favoured a significant increase in the level of household indebtedness. Some of these factors also had an impact on household savings in other advanced economies, such as the euro area and the United States, which, with some slight differences, allowed saving rates over these years to remain below historic averages.

The drop in Spanish household savings over those years is in line with the sharp increase in their investment, particularly in real estate assets. In fact, as shown in figure 1, one of the most noteworthy characteristics is the high level of importance of real estate assets, which accounted for 79% of the total assets of Spanish households, compared with 11% of financial assets. This structure of household savings is clearly different to that of other advanced economies, in which the importance of financial assets is much higher. Accordingly, in the euro area, financial assets account for 40% of total household assets (real estate assets account for 56%), 46% in the United Kingdom, 37% in Japan and 68% in the United States.

Following the outbreak of the crisis in 2007, the sharp increase in uncertainty and risk aversion substantially raised the saving rate of households over 2008 and a large part of 2009, accentuating the conservative nature of this sector, although savings tended to drop subsequently down to levels a little higher than those seen before the crisis. The changes in Spanish household savings were sharper than in the euro area or in the United States, possibly as result of the size of precautionary savings, which were particularly high in Spain. The weaker job market, which has a decisive influence on unemployment expectations and, therefore, future income, the fall in wealth, the tightening of financing conditions and the worsening of domestic public finances are factors which undoubtedly had a notable impact on the consumption and investment decisions of Spanish households in these years and which, possibly, will continue to do so in the near future.

1 From a review of the non-financial accounts of the INE (Spanish Statistics Institute), the gross savings of households are defined as the part of the gross disposable income which is not used for final consumption. In accordance with the Financial Accounts of the Bank of Spain, the sum of the gross savings of households, the net capital transfers received by this sector and the funds obtained from the increase in their liabilities make up the available balance of households for investing in both financial and non-financial assets.

Composition of household assets[1] (% of total assets) FIGURE 1



Source: Bank of Spain, ECB, US Federal Reserve, UK Office for National Statistics and JP Statistics Bureau (Ministry of Internal Affairs and Communications).

1 Data from 2008 for Spain and the United Kingdom, from 2009 for Japan, and from 2011 for the euro area and United States.

This article analyses the main recent trends in Spanish household savings and the outlook over the short and medium term, establishing points of comparison with other countries. For this purpose, the article is structured as follows: section 2 describes the evolution of the saving behaviour of Spanish households in the years prior to the crisis (2000-2006). Section 3 analyses the main trends in the changes in household savings and investment following the crisis and indicates the outlook for savings and investment over the short and medium term. The behaviour of households in the euro area and the United States is illustrated throughout the article so as to distinguish the common trends from those which are specific to Spain. Some conclusions are presented in section 4.

2 Evolution of the saving rate in the years prior to the crisis

Economic theories on the determining factors for household savings, such as the life-cycle consumption hypothesis[2] and the permanent income hypothesis,[3] indicate that households aim to maintain relatively stable consumption over time so that savings make it possible to soften the consumption pattern, isolating it from any temporary fluctuations in income or wealth levels. Similarly, the increase in households' perceived uncertainty may lead to substantial increases in their precautionary savings.[4] Other relevant macro-financial factors when determining the level of household savings are the economy's real interest rate, the

2 See Modigliani and Ando (1957), "Tests of the life cycle hypothesis of savings: comments and suggestions", in *Bulletin of the Oxford University Institute of Statistics*, pp. 99-124.

3 See Friedman (1957), *A theory of the consumption function*, Princeton University Press.

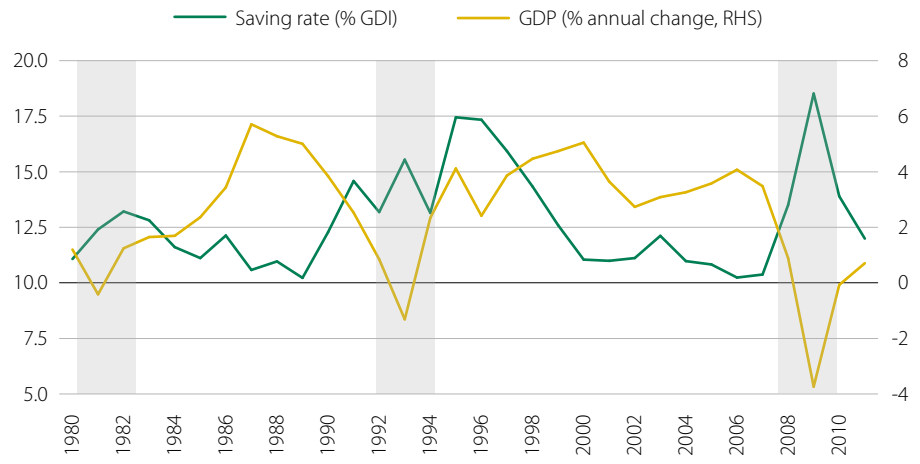
4 See, for example, Weil (1993), "Precautionary savings and the permanent income hypothesis", in *The review of Economic Studies*, vol. 60, Issue 2, pp. 367-383 or Caballero (1990), "Consumption puzzles and precautionary savings", in *Journal of Monetary Economics*, Elsevier, vol. 25(1), pp. 113-126.

evolution of public finances and the level of development of the domestic financial system, as well as certain socio-demographic factors, such as the age of household members.

Other factors such as the evolution of public finances in the economy can play a significant role in the savings decisions of households, especially in times of crisis which usually go hand-in-hand with public deficits of a certain size. The need for fiscal consolidation and, therefore, the expectations of future tax increases may raise current household savings (the Ricardian equivalence proposition).[5] If the proportion of households which behave in this manner is sufficiently high, the increase in public spending could have a significant positive effect on private savings.

Furthermore, the level of development of the financial system may have opposing effects on savings decisions. On the one hand, a more sophisticated financial system offers greater availability and variety of savings instruments and, therefore, would have a favourable effect on savings. In the case of Europe, the creation of a monetary union has contributed to the development and integration of the financial markets in its Member States and has led to an increase in the investment possibilities of its agents. However, financial development processes usually lead to it being easier for households to obtain financing, which may provide an incentive to increasing consumption and decreasing savings. Some studies on the US economy reveal that the second effect has been much stronger, concluding that the development of the financial system in the United States has tended to reduce the household saving rate.[6]

Saving rate of Spanish households and GDP FIGURE 2



Source: Thomson Datastream. The periods of recession are shaded.

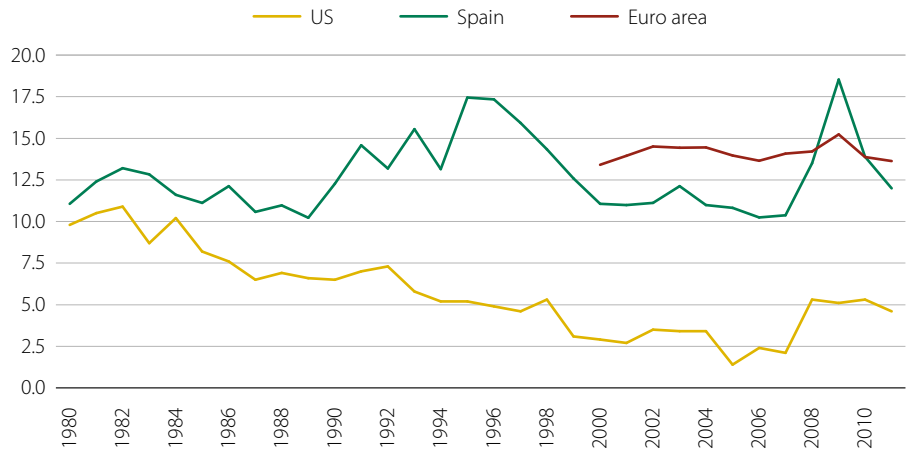
5 See Barro (1974), "Are government bonds net wealth?", in *Journal of Political Economy*, vol. 82 (6), pp. 1095-1117.

6 See Cuadro-Sáez (2011), "Determinantes y perspectivas de la tasa de ahorro en EE.UU." [Determining factors and outlook for the US saving rate], in *Boletín Económico* [Economic Bulletin], Bank of Spain, pp. 110-121. To see the effect of the development of the financial system on the saving rate of the private sector in emerging economies, see Bandiera *et al.* (2000), "Does financial reform raise or reduce saving?", in *The Review of Economics and Statistics*, May 2000, 82(2), pp. 239-263.

From a broad time perspective (see figure 2), we can see that the saving rate of Spanish households has ranged between minimum values close to 10% of their disposable income, reached at the end of the 1980s and the moments prior to the latest crisis, and maximum values of 18% in 2009, at the height of the international financial crisis. Throughout the three recessions which the Spanish economy suffered between 1980 and 2010, household savings increased significantly, particularly during the recession of 1992-1993 and the first stages of the current crisis. In comparative terms, the saving rate of Spanish households (as a proportion of gross disposable income) from 2000 up to the start of the crisis was close to three points lower than in the euro area (see figure 3).

The importance of the different determining factors for the development of the household saving rate has changed over time (see figure 4). In the sample period prior to the latest financial crisis, the saving rate of Spanish households dropped from highs of greater than 17% of gross disposable income in the middle of the 1990s down to lows of 10% in 2006 and 2007. A significant part of the sharp fall in savings was mainly down to four factors. The improvement in future income expectations in an environment of strong economic growth, the increase in household wealth, particularly real estate assets, the sharp fall in real interest rates (which even turned negative) and, finally, the increase in credit granted in the Spanish financial system, which, in the context of growing competition, allowed a significant rise in household debt.[7]

Household saving rate in Spain, euro area and US[1] (% gross disposable income) FIGURE 3



Source: Thomson Datastream and Eurostat.

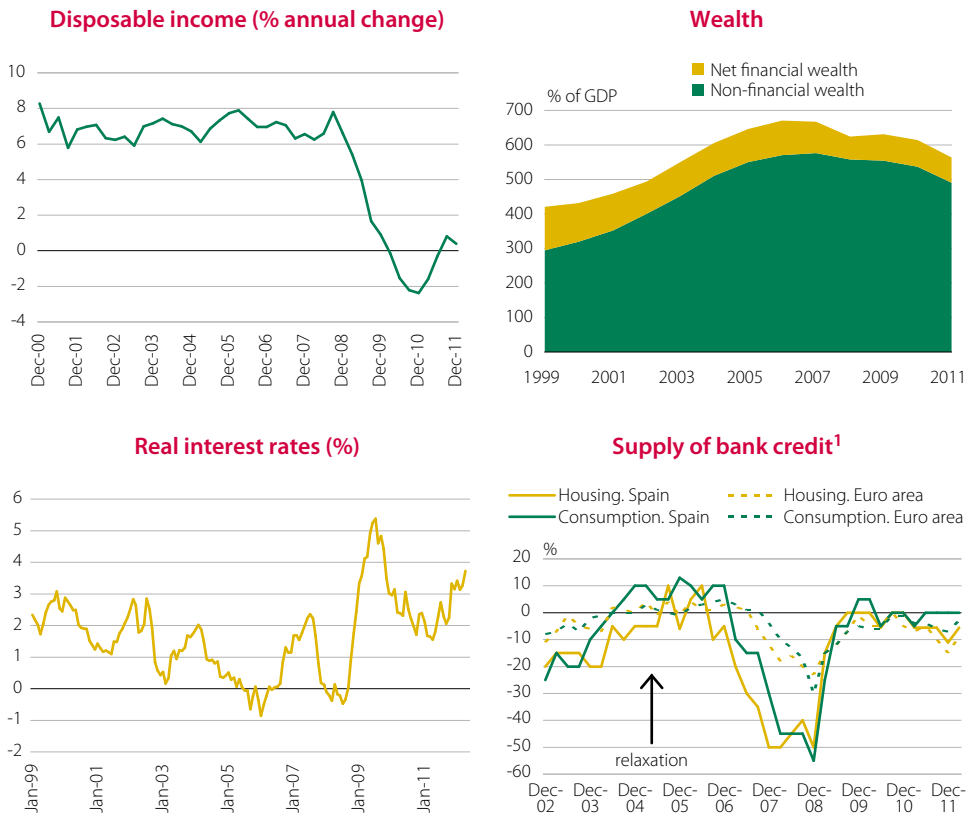
1 It is important to point out that the series are not fully comparable, given that in the case of the United States the reference savings series are shown in net terms (subtracting the fixed capital consumption of sole proprietors), while in Spain and the euro area the figures shown are for gross savings. The difference between the gross and net savings of US households is around 12 percentage points of disposable income.

The fall in household savings over these years was in line with the increase in their investments, both in financial and non-financial assets, as a result of the intense use

7 These factors are basically the same as those identified for the United States (see previous footnote).

of bank credit. As shown in figure 5, between 2000 and 2007 the average annual acquisition of non-financial assets, mainly real estate assets, stood at 4.3% of GDP, reaching a high of 5% of GDP in 2005. Consequently, the relative importance of these assets in the portfolio of Spanish households, which was traditionally high, stood at above 80% in 2005, according to data taken from the Family Financial Survey (Spanish acronym: EFF). Specifically, 74% of real estate assets corresponded to the primary residence and the remaining 26% to other properties. For its part, the net annual acquisition of financial assets in the same period was 8.9% of GDP on average, with a high of 10.9% of GDP in 2006.

Determining factors of the saving rate of Spanish households FIGURE 4



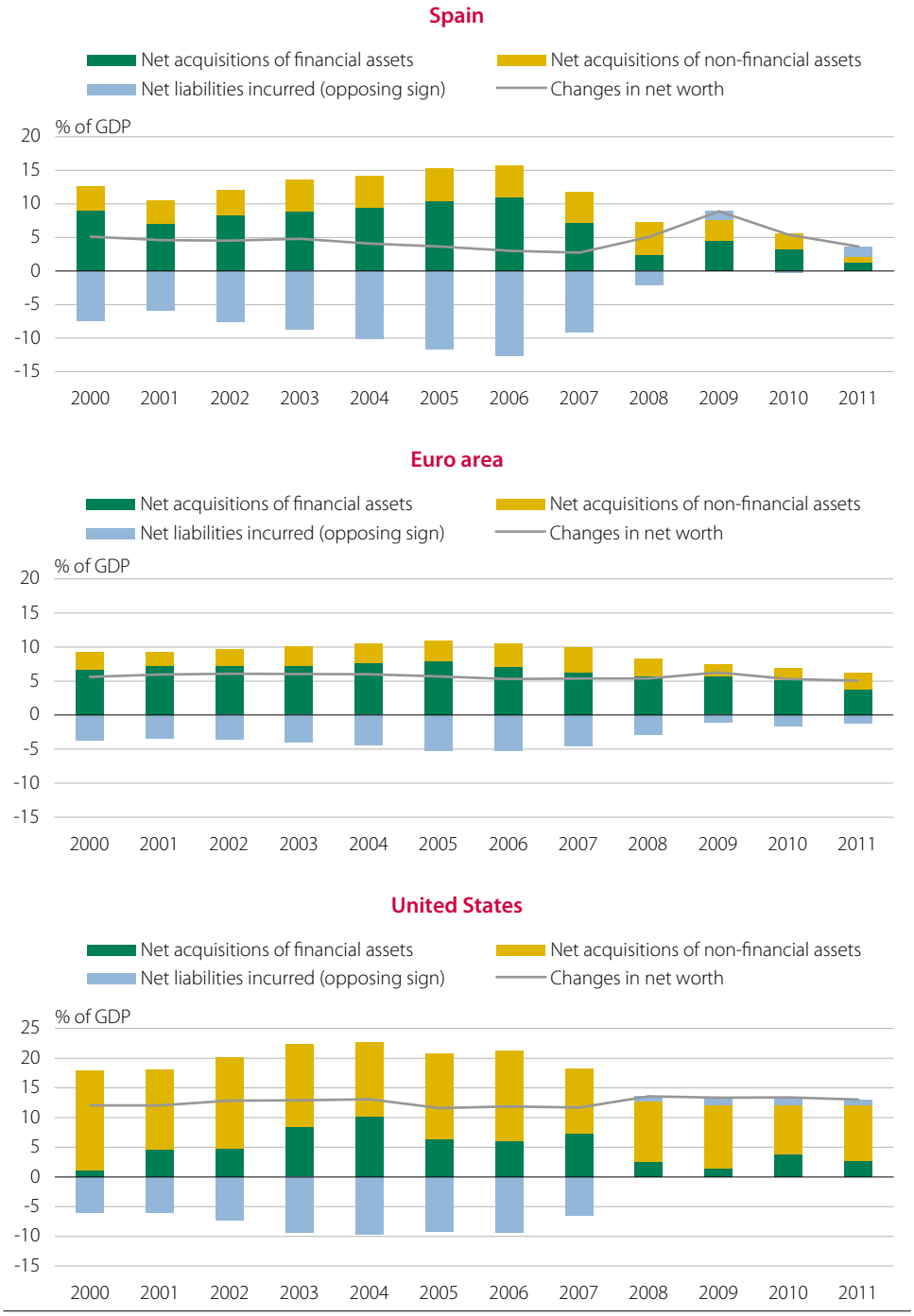
Source: Thomson Datastream and Bank of Spain.

1 Data from the Bank Lending Survey (Spanish acronym: EPB). The lower right figure represents the changes in the approval criteria applied to household loans for housing and for consumption. The indicator is calculated as a percentage of institutions which have considerably relaxed criteria x 1 + percentage of institutions which have relaxed criteria to a certain extent x 1/2 – percentage of institutions which have tightened criteria to a certain extent x 1/2 – percentage of institutions which have considerably tightened the criteria x 1.

The trends of the key figures relating to household savings in the euro area were similar to those described for Spain in the period under consideration. Therefore, in the same period European households reduced their savings and, at the same time, increased their investment in financial and non-financial assets as a consequence of the increase in their liabilities. However, the sizes of these movements were smaller than those seen in Spanish households. In particular, the annual average investment of euro area households in non-financial assets amounted to 2.8% of GDP, while investment in financial assets stood at 7.2% of GDP (see figure 5).

Net acquisition of assets, liabilities incurred and net assets

FIGURE 5



Source: Financial Accounts of the Bank of Spain, Eurostat and the Federal Reserve.

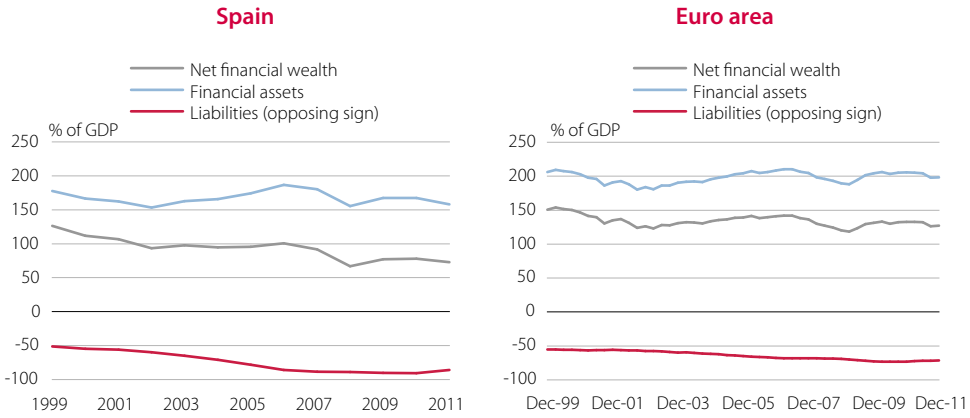
One of the most important differences between the behaviour of Spanish households and euro area households is related to the increase in their indebtedness, which was particularly sharp in the case of Spain. Specifically, the annual average increase in the liabilities of Spanish households in this period was 9.1% of GDP, compared with 4.2% for euro area households. Consequently, the debt ratio, which in 2002 was slightly lower than 80% of gross disposable income both for Spanish households and for euro area households, increased sharply up to highs of close to 130% of gross disposable income in 2006 for Spanish households, while remaining at levels slightly above 90% for euro area households.

The composition of the financial investment of Spanish households was highly conservative, even in the boom years, as indicated above. The main financial instruments acquired by households over this period were term deposits (4% of GDP), insurance and pension funds (2.1%) and cash and transferable deposits (1.6%).

Other types of riskier investments, such as mutual funds and shares, together accounted for a relatively modest part of household investment (0.7% of GDP) in this period (see figure 9). In fact, Spanish households generally do not invest in this type of asset or do so in very small quantities.[8] For example, according to the results of the EFF in 2005, 85% of the total amount invested in mutual funds corresponded to the top 25% of households in terms of wealth. This figure increased to 91% in the case of listed shares.[9] Furthermore, 57% and 62% of the households that invested in mutual funds or listed shares, respectively, belonged to the top wealth quartile. If we review the educational level of the head of household, the results would be similar. With regard to age, most of the investors were between 45 and 65.

The evolution of the investment of Spanish households, together with the changes in prices of the acquired instruments, led to a conservative financial portfolio which increased in volume from a level slightly above 150% of GDP in 2002 to highs of close to 190% of GDP in 2006 (see figure 6). The relative importance of cash and deposits remained, with few variations, around 40% of the total asset portfolio, as was the case of insurance and pension plans, at close to 15%. With regard to riskier instruments, the proportion of investment in mutual funds or listed shares fell progressively, while the importance of unlisted shares and other equity instruments in the portfolio rose significantly from 15% up to 25% of the total (see figure 9).

Household financial wealth FIGURE 6



Source: Bank of Spain, ECB and Eurostat. Data up to December 2011.

8 Although on average in the period 2000-2007, household investment in mutual funds was relatively modest compared with the investment made in other types of investment, it is important to highlight the growth in this industry between 2003 and 2005, driven both by the improvement in the Spanish macroeconomic and financial environment and by the change in the tax treatment of these products (in 2003 the tax "toll" was eliminated).

9 See Villanueva and Ispierto (2010), *Perfil inversor de los hogares españoles: análisis de la Encuesta Financiera de las Familias* [Investment profile of Spanish households: analysis of the Family Financial Survey], CNMV, Working Document No. 40.

Financial investment of euro area households, which averaged 7.2% of GDP between 2000 and 2007 (8.9% in Spain), was also conservative, although with some differences compared with Spanish households. In particular, the largest investment was made in insurance and pension funds, which accounted for almost half of the investment of European households. It was followed by investment in bank deposits (2.4% of GDP), which were an important product for these households, but less than for Spanish households. Finally, investment in securities markets instruments was low and similar to that of Spanish households (see figure 12). The financial asset portfolio of European households, with a volume of 25 percentage points of GDP higher than for Spanish households between 2000 and 2006, was also conservative, but in which insurance and pension funds were twice as important as in Spanish households, while cash and deposits accounted for a little over 30% of the total. With regard to financial market instruments, euro area households maintained a lower proportion of their assets in shares and mutual funds compared with Spanish households, while investment in fixed-income products (8% of total assets) was significantly higher.

For its part, the financial asset portfolio of US households was significantly different from that of Spanish households in the period under consideration. The differences can be seen both in the volume of financial assets, which is much higher in the case of US households, and in their composition, with insurance and securities market instruments being much more important in the United States. The financial assets of US households, which accounted for a little under 350% of GDP in 2000, fell to lows of close to 285% of GDP in 2002, and subsequently rose to values over 350% of GDP just before the start of the crisis. These fluctuations were wider than those recorded in the portfolios of Spanish households because the proportion of shares and mutual funds was much higher in US households. In fact, the composition of the portfolio of US households, which did not record very significant changes between 2000 and 2007, was characterised by the greater relative importance of insurance and pension funds (more than one third) and financial market instruments. Specifically, the importance of the fixed-income portfolio, which accounted for 10% of total assets, was much higher than in the case of Spain. Finally, bank deposits only just exceeded 15% of total assets (see figure 13).

3 Impact of the financial crisis on household savings

3.1 The evolution of savings during the crisis

Since the start of the financial crisis, household savings in Spain have followed a similar trend to other advanced economies, such as the euro area or the United States, although with much sharper changes. The saving rate of Spanish households in terms of gross disposable income, which had recorded values of around 10-12% since 2000, shot up between September 2007 and the end of 2009, when it reached a historic high of 18.5%. In 2010, the saving rate fell sharply and in 2011 its rate of decline slowed down and it once again stood slightly above the values of the years immediately prior to the crisis. The saving rate stood at 11.6% at the end of 2011, 0.9 percentage points above the average percentage recorded during the years prior

to the crisis (2004-2007).[10] However, the household saving rates of other advanced economies, despite showing the same trend as in Spain since the start of the crisis, have shown greater stability during the period (see figure 3).

The start of the financial crisis and its ramifications worldwide led to a widespread loss of confidence, which was more intense in more vulnerable economies, such as Spain, which had accumulated various imbalances in the years prior to the crisis. In this context, Spanish households notably increased their savings during 2008 and 2009. This rise in savings, with a significant precautionary component, took place amid an environment marked by a sharp increase in the household risk aversion, falls in income expectations, loss of financial and non-financial wealth and restrictions in access to bank credit. Further information on the impact of these factors on the savings of Spanish households is presented below.

The quick growth in unemployment suffered by the Spanish economy, with a jobless rate of 23% of the active population in 2011, much higher than in other industrialised economies and the difficulty of unemployed workers to get back into the job market,[11] generated a high level of uncertainty in expectations on future household income, which in turn led to an increase in their savings so as to cover future contingencies (remaining unemployed for a long period of time, using up welfare benefits, etc.).[12]

In addition to the worsening expectations about their income, the wealth of households has fallen dramatically since the start of the crisis, driving households to save. On the one hand, the fall in the price of real estate assets led to a sharp fall in the value of household real estate wealth, more than 80% of GDP since the price of these assets started to fall in September 2007 (see upper right panel of figure 4). On the other hand, net financial wealth has fallen to a much lesser extent since the start of the crisis (20% of GDP), as the fall in the price of financial assets was partially offset by the slowdown in the rate of incurring liabilities. As a whole, total net household wealth stood at 564% of GDP in December 2011, significantly lower than the level of close to 670% recorded in September 2007 (see upper right panel of figure 4).

A third factor encouraging household savings was the greater difficulty to access bank financing as a result of the financial crisis, as shown in the bank lending surveys. This effect was stronger in Spain than in other euro area countries (see the lower right panel of figure 4). Households currently face much harder conditions for accessing bank credit than prior to the crisis. At the end of 2011, the outstanding

10 The preliminary savings data for the first quarter of 2012 indicates that household savings fell in that quarter as a result of the drop in disposable income and the slight growth in household consumption. The average saving rate for the last four quarters dipped to 10.8% of disposable income, 0.7 percentage points down on the end of 2011.

11 This difficulty in reassigning resources in the Spanish labour market is largely due to its rigid nature, especially in the area of hiring and dismissal costs, which are higher than in most European countries. An illustration of these characteristics is available in the section "Employing Workers Data" in the periodic reports under the title "Doing Business" prepared jointly by the World Bank and the International Finance Corporation. See, for example, World Bank and, IFC (2012), "Doing business in a more transparent world. Comparing regulation for domestic firms in 183 economies".

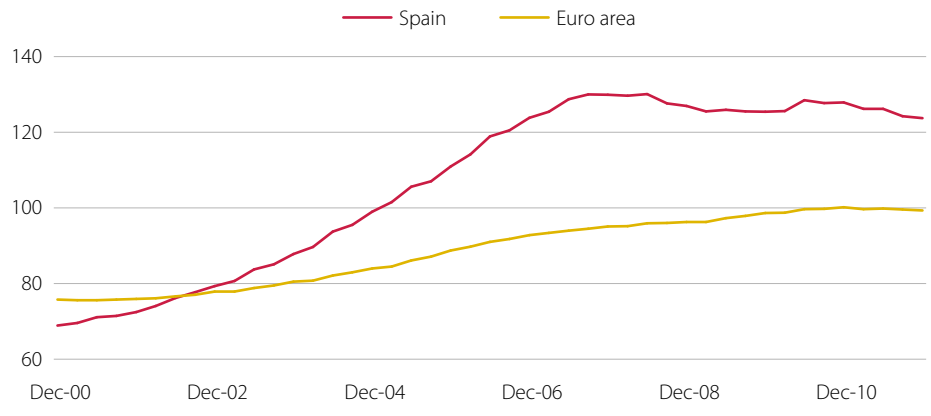
12 See, for example, Barceló and Villanueva (2011), *Los efectos de la estabilidad laboral sobre el ahorro y la riqueza de los hogares* [The effect of job stability on household savings and wealth], Bank of Spain, Working Paper 1002.

balance of bank credit granted to Spanish households continued contracting at year-on-year rates of 2%, reflecting both the tightening of supply conditions and a fall in solvent credit demand.

Finally, it is possible that some Spanish households might have shown a "Ricardian" behaviour during the crisis, anticipating future tax rises as a result of the sharp increases in public spending, which might have eventually encouraged them to increase their level of savings.

As commented above, since 2010 there has been a fall in the saving rate of Spanish households, at a rate similar to the rise seen in the two previous years, which subsequently slowed down throughout 2011. In addition, the above precautionary factors lost strength over 2010 and the first half of 2011 as a consequence of the early indications of economic recovery and the slowdown in the growth of the unemployment rate. However, in the subsequent months, increased uncertainty associated with the growing tensions in European sovereign debt markets and the significant worsening of domestic economic activity contributed towards slowing down the fall in the saving rate. The desire of households to soften their consumption path, together with the increase in the number of households which have exhausted their capacity to save are factors which presumably would be limiting a greater rise in the saving rate over the most recent period.

Household debt[1] FIGURE 7



Source: ECB. Data up to December 2011.

1 Calculated as the outstanding balance of loans taken out by households as a percentage of their annual gross disposable income.

3.2 Composition of household savings

The high variability of the household saving rate over the crisis has been accompanied by a significant reduction in the rate of financial and non-financial transactions aimed at channelling household savings, as well as a recomposition of the financial asset holdings of this sector in favour of lower risk instruments, as usually occurs in a context of strong risk aversion. As shown in figure 5, from the historic highs recorded in 2006 in assets acquired and liabilities incurred (close to 15% of GDP), in 2011 the figures stood at slightly over 2% of GDP for the former and a fall of household liabilities of close to 3% of GDP.

With regard to asset acquisition by households, that relating to non-financial assets, mainly real estate assets, dropped to below 1% of GDP in 2011, from levels of around 5% in the years immediately prior to the crisis. Similarly, investment in financial assets fell from levels of close to or greater than 10% of GDP over most of those years down to a little over 1% of GDP in 2011.

As indicated above, at the same time, there have been substantial changes in the composition of the financial portfolio which have accentuated its conservative nature. During the crisis, household investment decisions have been determined by their perception of risk in financial markets. Accordingly, in 2008, Spanish households carried out major net redemptions of mutual funds[13] and increased their holdings in term deposits, which guaranteed some return in exchange for lower risk (see the upper left panel of figure 9). In line with the temporary fall in uncertainty in 2009, Spanish households resumed, and even exceeded, the figures for the years prior to the crisis, the purchasing rate of greater risk instruments, mainly shares, but also listed fixed income instruments. 2010 once again saw greater preference for term deposits accompanied by net redemptions of mutual funds. However, in the last quarter of 2011, Spanish households carried out significant acquisitions of fixed-income securities, especially short-term securities, in line with the marked increase in the yields of Treasury bills and the interest of financial institutions in raising retail funds through commercial paper. The hardening of the financial crisis and the difficulty in accessing wholesale finance led to competition among Spanish banks to acquire funds through their branch network, with increases in returns and time periods of these types of assets.[14] All in all, the amount of short-term negotiable instruments acquired, basically through the two aforementioned instruments,[15] amounted to eight billion euros, the maximum volume of the historic series, to the detriment of long-term deposits, which recorded withdrawals of close to ten billion euros.

As shown in figure 8, the bank deposits of non-financial companies fell, as did those of Spanish households although to a lesser extent, following the introduction of the increase in bank contributions to the Deposit Guarantee Fund linked to the surplus in the returns offered by these instruments over average market returns.[16] As indi-

13 There was uneven behaviour in mutual funds depending on the different categories. Net exits of funds were concentrated in fixed-income mutual funds, in global funds and guaranteed equity funds. Meanwhile, guaranteed fixed-income funds were net receivers of resources.

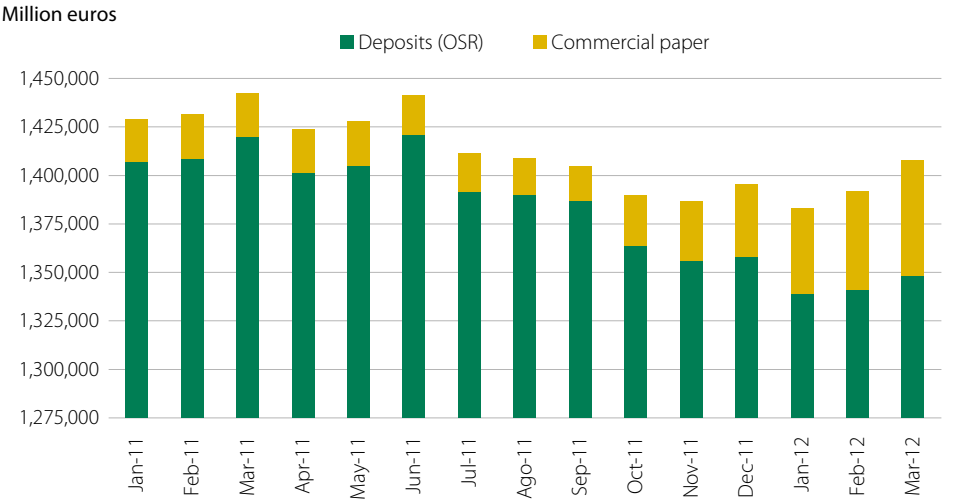
14 Issues of commercial paper of financial institutions in the last quarter of 2011 and the first quarter of 2012 amounted to 90 billion euros, almost double the amount issued in the same period of the previous year. However, the change in volume issued by non-financial companies was marginal over the same period (729 million euros, compared with 630 million euros the year before). Also see footnote 15 for an estimate of the volume of this type of security acquired by retail investors.

15 According to data from the Public Treasury, held-to-maturity Treasury Bills in the hands of resident households increased by close to 1.3 billion euros in the last quarter of 2011 (see http://www.tesoro.es/SP/home/estadistica.asp). For its part, the acquisition of commercial paper listed on the AIAF fixed-income market by retail customers in outright trades was greater than 2.5 billion euros in the last quarter of 2011 (see http://www.aiaf.es/esp/aspx/Portadas/Home.aspx). In the first quarter of 2012, the acquisition of this type of security by retail customers amounted to 1.65 billion euros.

16 Royal Decree 771/2011, of 3 June, which amends Royal Decree 216/2008, of 15 February, on Own Funds of Financial Institutions and Royal Decree 2606/1996, of 20 December, on Deposit Guarantee Funds of Credit Institutions.

cated, the net withdrawals in bank deposits held by households, with the outstanding balance falling at rates close to 1% year-on-year in March 2012 (-0.2% in 2011) has been accompanied by an increase in the holdings of short-term fixed-income securities.

Outstanding balances of deposits to OSR[1] and commercial paper FIGURE 8



Source: Bank of Spain and CNMV.

1 Other Resident Sectors.

The changes in the financial portfolio of Spanish households during the crisis are not only due to the changes in the composition of the acquired assets, but also to the changes in the prices of the instruments traded on financial markets, which logically tend to be sharper in equity instruments (see upper right panel of figure 9). Greater acquisitions of safer instruments and a significant fall in price of equity assets have led to a sharp increase in the relative importance of the former up to 69% of the total portfolio in 2011, 14 percentage points more than in 2007.

Cash and deposits accounted for 50% of the total financial assets of Spanish households in 2011, 12 percentage points more than in 2007 (see table 1). Term deposits, with 27% of the total, saw the greatest growth, rising seven percentage points on 2007.

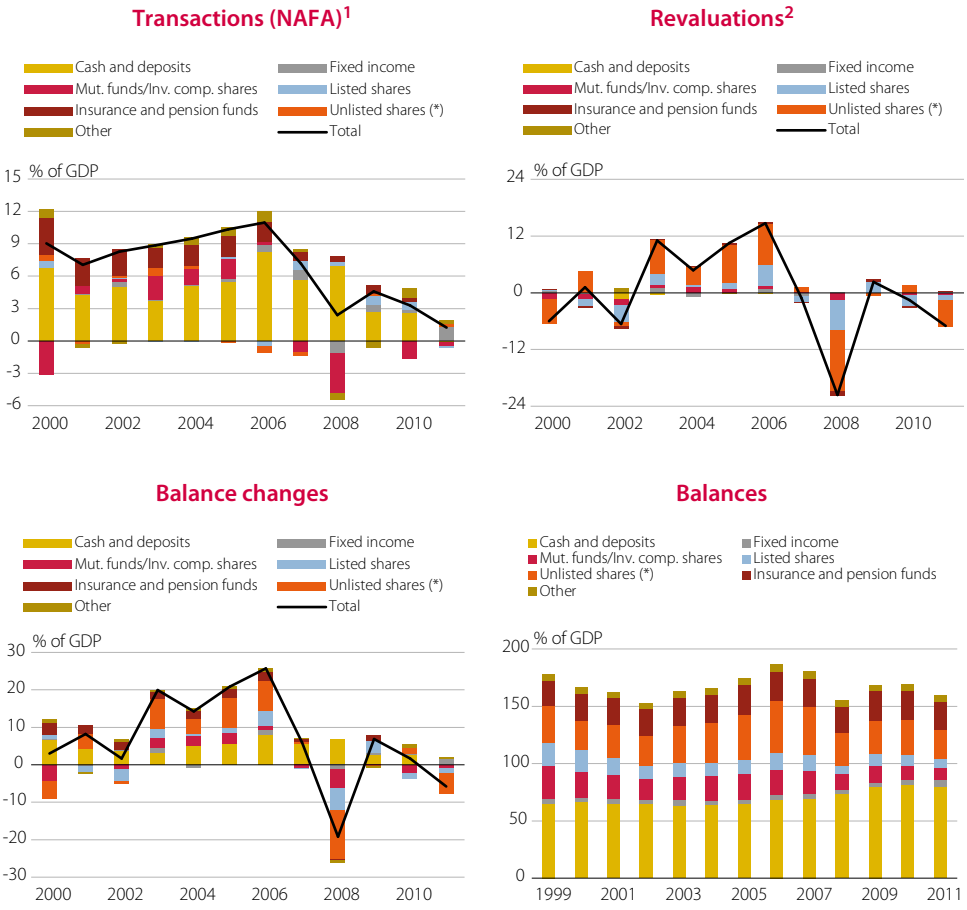
Life insurance and pension plans increased by two percentage points over the crisis, and accounted for a share of 16% of the total financial assets of Spanish households in 2011.

The relative weighting of high-risk assets in the household financial portfolio fell to 31%, 14 percentage points down on 2007. The fall in these assets was mainly due to the reduction in equity instruments held by households (11 percentage points, down to 20% of total assets). The sharpest fall was seen in unlisted shares and other equity instruments (eight percentage points, down to 15% of the total),[17]

17 The fall in unlisted shares and other equity instruments in the household portfolio of financial assets in the period 2007-2011 is exclusively due to the fall in the price of these instruments as Spanish households continued carrying out net acquisitions of said assets (see figure 9). The fall in prices was

which is above the fall in listed shares (three percentage points, down 5% of the total) and mutual funds and investment companies shares (four percentage points, down to 7% of the total). Holdings of fixed-income securities have increased by one percentage point over the crisis, up to 4% of total financial assets, due to the acquisition of public debt instruments and bank commercial paper in the last part of 2011.

Evolution and composition of financial assets of Spanish households FIGURE 9



Source: Bank of Spain. Data up to December 2011. (*) Includes other equity instruments.

1 NAFA: Net acquisitions of financial assets.

2 Includes, apart from the changes in the prices of financial assets, other changes in the volume due to reclassifications of sectors between assets and updates in classifications for technical criteria. However, these last changes are insignificant over the period.

greater than in other instruments in the household financial portfolio, which might also have been the result of some reclassification between unlisted shares and other equity instruments and listed shares as, according to the approaches used in this article to measure the effect of price changes, said reclassification would be grouped within this item. On the other hand, the effect of net acquisitions has been less intense. The lower net investments in unlisted shares and other equity instruments might be the result, in addition to the above-mentioned point, of the high rates of withdrawals of SMEs (see Box 5.1 of the 2011 Annual Report of the Bank of Spain), which are normally not listed, since the start of the crisis and households perceiving the equity instruments in these types of companies as being more risky.

Composition of household financial assets (%)

TABLE 1

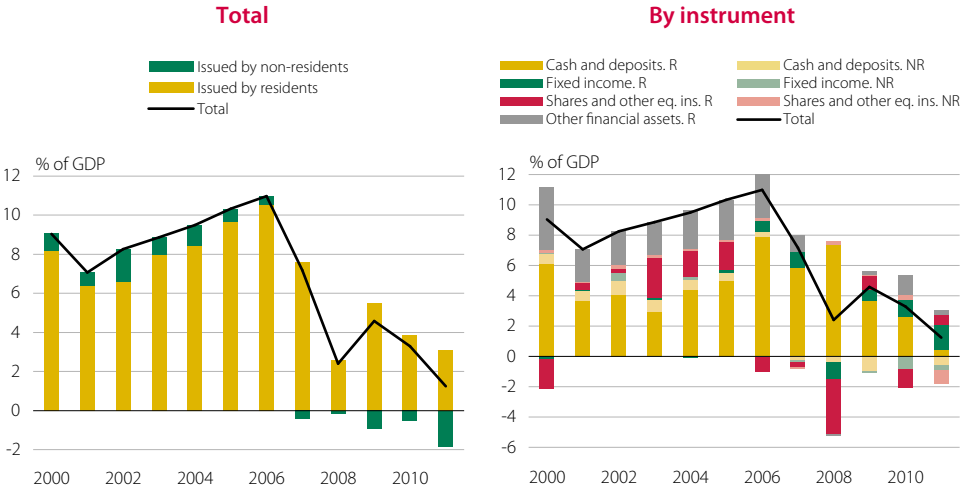
	Cash and transferable deposits	Term deposits	Fixed income	Mutual funds and investment companies shares	Listed shares	Unlisted shares and other equity instruments	Insurance and pension funds	Other
2005	21.8	15.5	2.1	12.9	7.2	22.6	14.5	3.3
2006	20.4	16.1	2.6	11.7	8.3	23.9	13.7	3.4
2007	19.1	19.3	2.6	10.8	7.9	23.4	13.6	3.4
2008	21.2	26.4	2.2	8.8	5.0	18.0	15.0	3.4
2009	22.8	24.4	2.5	8.4	6.6	17.2	15.2	3.0
2010	22.5	25.7	2.6	7.1	5.6	18.0	15.1	3.5
2011	23.3	26.6	3.6	6.8	5.0	15.2	15.7	3.8

Source: Financial Accounts of the Bank of Spain.

Figure 10 illustrates the investments made by Spanish households in financial assets over the last decade according to the residence of the issuer. During the financial crisis most disinvestments by Spanish households were made in shares and other equity instruments issued by resident entities (3.2% of GDP), with most taking place when the crisis erupted in 2008 (3.6% of GDP). Given the macroeconomic and financial context of the crisis, which is less favourable for investing in assets, households tended to invest in deposits of resident entities, for 14.1% of GDP in the period between 2008 and 2011. The net acquisition of fixed-income securities issued by resident entities totalled 2.3% of GDP between 2008 and 2011, which was most intense towards the end of 2011, while acquisition of other resident assets, mainly insurance and pension funds marketed by Spanish entities, amounted to 1.7% of GDP in the same period. As a whole, the net acquisition of financial assets of resident entities totalled 15% of GDP during the crisis.

Origin of the net acquisitions of financial assets

FIGURE 10



Source: Bank of Spain. Data up to 2011. Note: R: Residents; NR: Non-Residents.

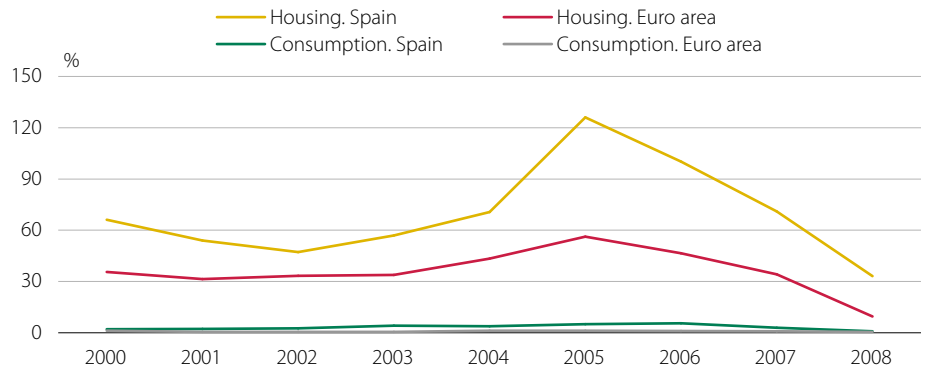
Therefore, in addition to the reorientation of the investment portfolio of Spanish households towards safer assets, there was also a greater bias in favour of domestic investments during the crisis as a result of the widespread increase in uncertainty. Since the start of the financial crisis, Spanish households carried out net disinvestments in all financial assets issued by non-resident entities. Between 2008 and 2011,

said disinvestments reached an amount equivalent to 3.5% of GDP, and were most marked in cash and deposits (2%) and fixed-income securities (1.2%), and less so in shares and other equity instruments (0.3%).

The composition of household savings in the euro area has not changed as drastically during the crisis as in the case of Spain. The relative stability of the saving rate also extended to investment and financing decisions (see central panel of figure 5). Accordingly, in the euro area as a whole there was a more gradual and smaller adjustment than in the case of Spain in net acquisitions of financial and non-financial assets (two percentage points, down to 4% and 2% of GDP respectively) and in liabilities incurred, which, in contrast with the deleveraging started by Spanish households since the end of 2008 (now close to 3% of GDP), continued expanding, although at a more moderate pace (between 1% and 2% of GDP, compared with growth of approximately 5% of GDP in the years prior to the crisis).

There are various factors which may help to explain the greater stability of the saving rate and of the investment and financing decisions of euro area households. Firstly, the lower relative increase in unemployment in the euro area has generated less uncertainty about future income expectations. Secondly, the fall in real estate wealth over the crisis has been less marked as a result of the lower relative weighting of housing in total household assets and the smaller falls in house prices. In particular, the real estate wealth of euro area households amounted to 278% of GDP in 2011, 22 percentage points lower than the high recorded in September 2007. Similarly, euro area households have shown less dependence on bank lending in their consumption and investment decisions and, therefore, the moderation of this financing channel in the current recessionary phase may be having a smaller downward effect on euro area household spending (see figure 11).

Relationship between bank lending and household investment in housing and consumption:[1] Spain and euro area FIGURE 11

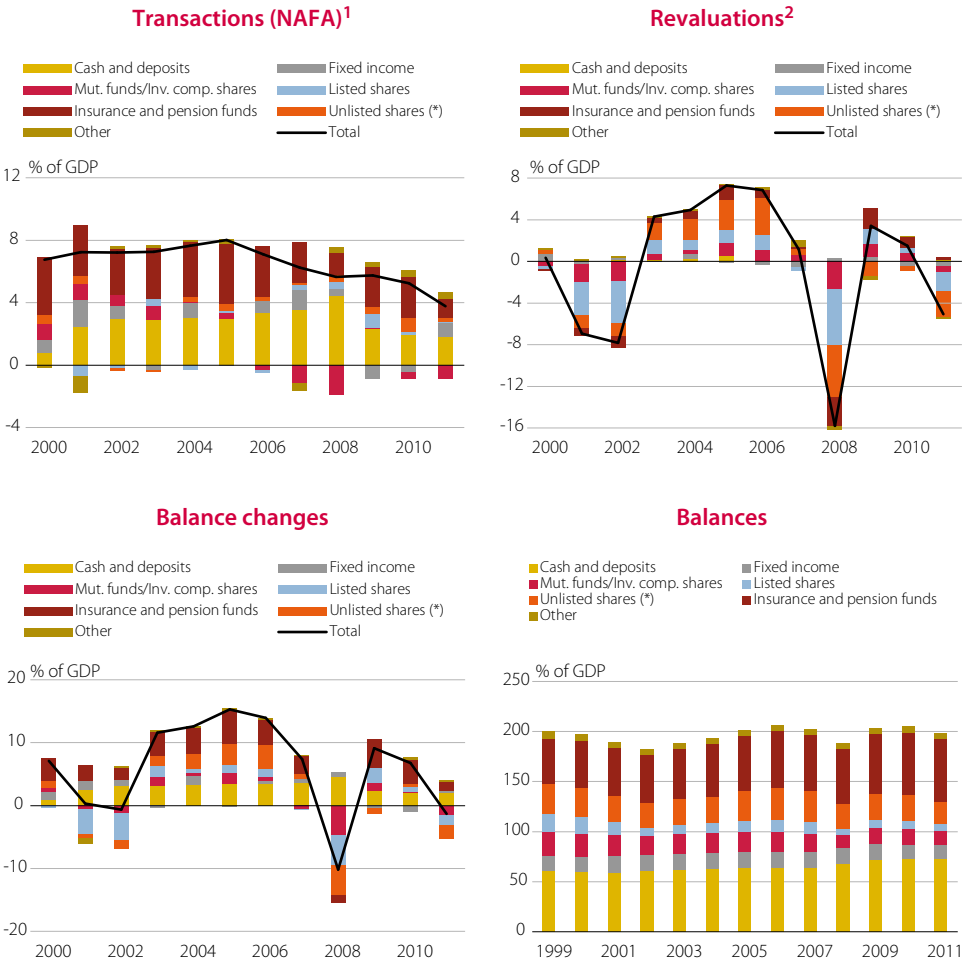


Source: Bank of Spain and ECB.

1 Calculated as the ratio between the increase in the outstanding balance of bank lending granted to households for each one of the purposes (acquisition of housing and financing of consumption) and the flows of households towards those items (gross fixed capital formation and spending on final consumption) in nominal terms. The series are only represented up to 2008, as from then on there is an accumulated fall in bank lending to Spanish households for the two items, thus hindering interpretation of the ratios. Between 2008 and September 2011, the average annual flow of household investment in housing in Spain fell by 14% compared with the average flow for the period 2000-2008, in contrast with growth of 2% in the euro area. On the other hand, the average annual flow of investment and consumption of Spanish households saw similar growth to that seen in the euro area (above 15%).

The composition of the financial portfolio of euro area households was also more stable than in the case of Spanish households (see lower right panel of figure 12). The percentage of their holdings in safer financial assets has not changed substantially during the crisis, as has been the case of Spain. In 2011, these assets accounted for 71% of total financial assets, eight percentage points higher than in 2007. The weighting of insurance and pension funds in the financial portfolio of euro area households was much higher than in the case of Spain, accounting for 32% of the total, a similar percentage to deposit holdings, which are a little higher in Spain in relative terms. The relative weighting of both instruments in total assets has grown by four percentage points since 2007. The weighting of other financial assets has not changed noticeably during the crisis, and accounts for 6% of the total.

Evolution and composition of financial assets of euro area households FIGURE 12



Source: ECB. Data up to December 2011. (*) Includes other equity instruments.

1 NAFA: Net acquisitions of financial assets.

2 Includes, apart from the changes in the prices of financial assets, other changes in the volume due to reclassifications of sectors between assets and updates in classifications for technical criteria. However, these last changes are insignificant over the period.

From among the riskier financial assets, the weighting of equity instruments in the financial portfolio of euro area households has fallen to 15% (21% in 2007), mainly due to the fall in the percentage of unlisted shares and other equity instruments

(four percentage points, down to 11% of the total in 2011), which was sharper than the fall in listed shares (two percentage points, down to 4% in 2011). For their part, mutual funds and investment companies shares and fixed-income securities, which each account for 7% of total assets, recorded falls of one and two percentage points respectively. It should be pointed out that the percentages of financial assets in mutual funds and investment companies shares held by euro area households and Spanish households are similar, but the percentage for fixed-income securities is higher in the former.

In contrast with the euro area, the composition of household savings in the United States has changed substantially during the financial crisis, although less sharply than in Spain. Investment in assets went from values of around 20% of GDP in the years prior to the crisis to values of 12-13% during the crisis and the reduction in liabilities, which began one year earlier than in Spain, progressed at a constant rate equivalent to 1% of GDP annually over this period (see lower panel of figure 5).

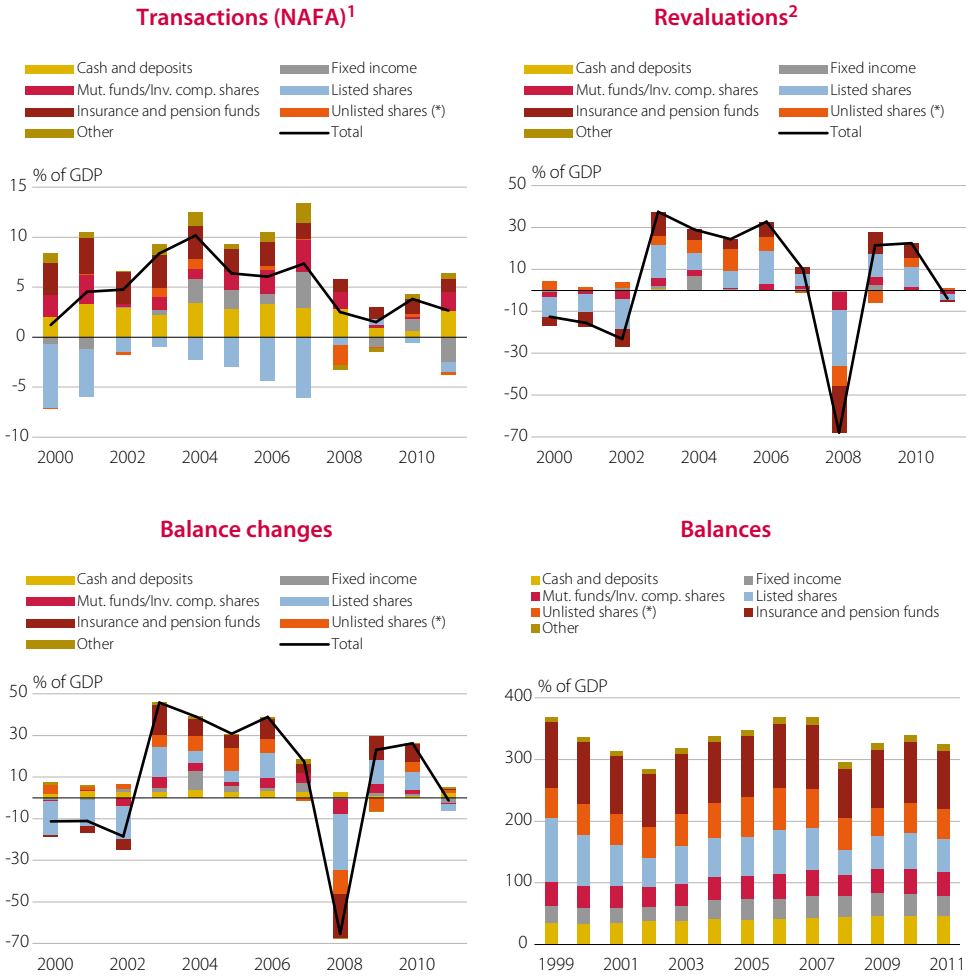
The sharp fall in house prices in the United States, greater than in the case of Spain, has had less impact on the wealth of US households compared with euro area economies, especially Spain, due to the lower weighting of real estate assets in the total assets of US households (30% of total assets on average between 2001 and 2011, compared with 58% in the euro area). Therefore, the wealth of US households has been more closely linked to the development of their financial assets, which, as in other advanced economies, have been conditioned by the increase in volatility and the accumulated falls since the start of the crisis in the prices of instruments traded on equity and fixed-income markets (see upper right panel of figure 13).

Despite the increase in uncertainty in financial markets and the fall in the investment flows of US households during the crisis, the composition of US household savings in financial assets has remained unchanged. Consequently, their investment pattern has continued to be directed towards insurance and pension funds, a riskier category than in the euro area, and mutual funds and investment companies shares (see upper left panel of figure 13). Unlike in Spain and, to a lesser extent, the euro area, US households as a whole have not carried out net redemptions of mutual funds and investment companies shares in any year of the crisis.

The percentage of insurance and pension funds in the financial portfolio of US households has hardly changed since 2007, standing at 29% of the total in 2011, which is similar to the figure for the euro area, but much higher than the figure for Spain. The percentage of the financial portfolio of US households in cash and deposits, mainly in term deposits, is markedly lower than in the euro area and particularly than in Spain, accounting for only 14% of the total in 2011 (two percentage points up on 2007). The third most important instrument, mutual funds and investment companies shares, maintained its proportion during the crisis at 12% of the total, a little less than double the figure for the euro area and Spain. The weight of direct participation in company capital, greater than in the euro area and Spain, is spread approximately equally between listed and unlisted shares and fell five percentage points to 31% of the total. Finally, the proportion of fixed-income securities in the portfolio is slightly higher than in euro area economies, and especially in Spain, and remained at around 10% of the total during the crisis.

Evolution and composition of financial assets of US households

FIGURE 13



Source: US Federal Reserve (*Flow of Funds Accounts*). Data up to December 2011. (*) Includes other equity instruments.

1 NAFA: Net acquisitions of financial assets.

2 Includes, apart from the changes in the prices of financial assets, other changes in the volume due to re-classifications of sectors between assets and updates in classifications for technical criteria. However, these last changes are insignificant over the period.

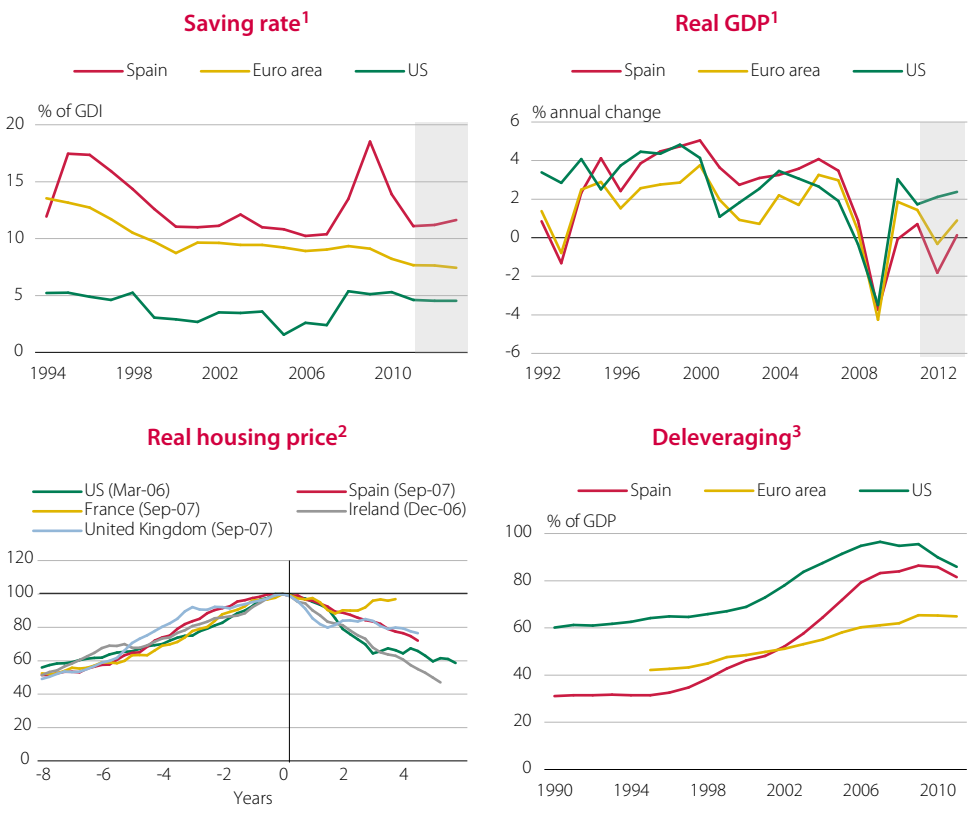
Consequently, the financial crisis has had a stronger impact on the investment decisions of Spanish households than in other advanced economies, reducing its tendency to invest in all types of assets and to incur liabilities and redirecting its financial portfolio towards less risky assets and preferably those issued by domestic entities. In euro area and US households, which share almost all these trends but in which the figures have changed to a lesser extent, the preference for safe assets leans towards insurance and pension funds more than bank deposits, as is the case in Spain. Furthermore, US households have had a more active role in the trading of equity and fixed-income instruments, either directly or indirectly through mutual funds.

The future evolution of the saving rate will depend on the behaviour of its main determining factors, which have been presented above. Several of them suggest that household savings will tend to be above the level seen prior to the crisis (see the upper left panel of figure 14). These include, firstly, the difficulties that the Spanish

economy is suffering to achieve a sufficient level of activity so as to create employment and, consequently, to improve the income expectations of households (see upper right panel of figure 14). Secondly, the continuation of the housing price adjustment will continue having a negative impact on the wealth of Spanish households and, consequently, the tendency to consume may be reduced (see lower left panel of figure 14). Thirdly, complying with the public deficit targets for the next few years may add pressure to household income and the tendency to save if households anticipate new tax rises or cuts in social spending which leads them to raise their marginal tendency to save ("Ricardian" behaviour). Finally, households will continue in the deleveraging process which may be accentuated by the fall in the availability of credit in the current context of the restructuring and consolidation of the Spanish financial system.

There are factors operating in the opposite direction which may limit the upward trend in savings in the short term and which are mainly related to the desire of households to soften consumption and with a notable increase in the number of households which have exhausted their savings capacity.

Household savings and some determining factors FIGURE 14



Source: Central Banks and national statistics offices, IMF and OECD.

1 The shaded area indicates the forecast for 2012 and 2013. Gross saving rate for Spain and net saving rate for the euro area and the United States. The euro area rate is the weighted average by nominal GDP of the rates of the following countries: Germany, Austria, Belgium, Estonia, Finland, Netherlands, Ireland, Italy and Slovakia.

2 The variable is normalised at 100 in the period where it reaches its maximum level, which is reflected in brackets next to the name of each country. Data for Spain, Ireland and the United Kingdom at March 2012. Data for the United States up to December 2011. Data for France up to June 2011.

3 Calculated with the outstanding balance of household loans. Does not include other accounts payable. Data up to fourth quarter 2011.

4 Conclusions

Spanish household savings have undergone significant changes over recent years as a consequence of the extensive changes in the determining factors over the current financial crisis. In the period immediately prior to the crisis, the household saving rate fell to historic lows, close to 10% of gross disposable income in a context of a sharp expansion of the economy in which household income and wealth expectations rose, driving the tendency of households to consume. This reduction in household savings was in line with the sharp increase in investment both in financial and non-financial assets, mainly real estate assets, thanks to the resources obtained from bank credit. Falling interest rates and the loosening of criteria for granting credit, both for housing and for consumption, had a significant catalysing effect on this process.

Some of the factors which would explain the fall in the saving rate of Spanish households over the period prior to the crisis were also present in other advanced economies, such as the United States and the euro area. In both cases, household savings between 2000 and 2007 also remained below historic averages. However, there are two specific characteristics which describe the saving and investor behaviour of Spanish households. The first is related to the importance of real estate assets in total household assets, close to 80%, which is much higher than that seen in the main comparable geographical areas. The second characteristic is linked to the more conservative nature of financial investment, even in the boom years. The relative importance of more liquid and safer instruments, cash and bank deposits, remained at 40% of the household portfolio of financial assets in the years prior to the crisis and subsequently grew to 50%. In the euro area and the United States, the importance of insurance and pension funds in the household portfolio was much higher, as was the case with securities market instruments, particularly fixed-income instruments.

Following the start of the crisis, worsening income expectations substantially raised the savings of Spanish households, up to highs of 18% of gross disposable income in 2009, and also that of the other economic areas under consideration, although to a lesser extent. This increase in savings for precautionary reasons tended to fall gradually as a consequence of the temporary fall in household uncertainty, as well as certain exhaustion of savings capacity. In this context in which the resources obtained through bank credit fell significantly in line with the start of the deleveraging process, household investment fell substantially and was also redirected towards more conservative instruments, particularly bank deposits. For their part, the relative importance of financial market instruments in the total portfolio fell significantly.

In this context, several factors lead us to think that the household savings level will remain above the lowest mark prior to the crisis over the medium term. These include the clear worsening of the domestic job market, which is permanently reducing income expectations, and the fall in household wealth, particularly real estate wealth, resulting from the fall in house prices over recent years. Thirdly, the need to reduce the public deficit in the coming years may mean at least some households behave in a "Ricardian" manner, raising their savings in view of future increases in taxes and/or spending cuts. The continuation of the deleveraging process of households will also play an important role. However, the increase in the number of households which have exhausted their savings capacity as a result of the fall in their disposable income may continue to limit the upward trend in the saving rate over the coming quarters.

Analysis of the merger of the BATS and Chi-X MTFs by the UK Competition Commission

Carlos Aparicio Roqueiro (*)

(*) Carlos Aparicio Roqueiro belongs to the Research, Statistics and Publications Department of the CNMV.

1 Introduction

In February 2011, BATS MTF, one of the main multilateral trading facilities in the UK, launched a 300-million dollar takeover bid for Chi-X MTF, the top trading facility in the United Kingdom. As established under UK legislation, the takeover required prior approval from the UK Competition Commission (hereinafter UKCC) as the company resulting from a merger would have a significant market share. The UKCC, after performing the corresponding study, gave its approval to the takeover,[1] which took place in December 2011.

In accordance with its responsibilities, the inquiry conducted by the UKCC aimed to identify and assess the possible negative consequences of the merger in terms of competition, with special attention paid to the potential reaction of the parties directly involved in the merger, their competitors and their customers. This procedure and the information which it provides are also of special interest to regulators and supervisors of securities markets for various reasons. In particular, it is a study on the behaviour of agents of interest to securities regulators in this type of trading facility, conducted by a public authority with significant experience. The study is extremely enlightening even though it is conducted from a different perspective from that which would be expected in the field of securities markets. Furthermore, the inquiry is conducted in one of the countries with the largest, most sophisticated and most dynamic trading facilities and is therefore especially informative for regulators and supervisors of other markets where these facilities still have a smaller presence. The inquiry provides detailed economic data and opinions of the agents involved, as well as other valuable information for securities regulators.

It should be pointed out that the UKCC, in its analysis of the merger's implications, uses information and criteria based on, or closely linked to, securities regulation, especially the MiFID. In particular, the UKCC indicates the importance which the MiFID had at the time of the appearance and development of markets such as BATS and Chi-X and explains how their presence has led to a reduction in the cost of providing trading services. Furthermore, it explains in detail how regulation and technology upgrades mean that entry costs into this market are constantly falling. The analysis of the behaviour of the intermediaries operating on the trading facilities also highlights the increasing use of algorithms in application of the best execution principle.

This article aims to highlight the key information and analysis in the UKCC report which is of greatest interest to securities regulators and supervisors. With this objec-

1 The final report, dated 24 November 2011, is the *BATS Global Markets, Inc / Chi-X Europe Limited merger inquiry. A report on the anticipated acquisition by BATS Global Markets of Chi-X Europe Limited*. This report and other auxiliary documents from the process are available on the UKCC's website: http://www.competition-commission.org.uk/our-work/directory-of-all-inquiries/bats-trading-chix-europe.

tive, the article is structured as follows: section 2 describes the trading facilities market in the United Kingdom, including information on the importance of each platform, which is completed in section 3 with a description of their services and prices. Section 4 describes the behaviour of their customers, especially the decision-making process when choosing which trading facility to use. Section 5 takes into account the above points to analyse the existing barriers to entry for creating and expanding trading facilities, describing in detail those which arise from the network effects resulting from the natural tendency of liquidity to become concentrated. Finally, the article presents some important conclusions for regulating the trading facilities market.

2 The relevant market

2.1 The impact of the new trading platforms in the UK market

The UK equity market has a relatively high number of different types of trading infrastructures, including many which operate as multilateral trading facilities (MTFs) under the MiFID, as shown in table 1.

UK-listed on-book equities. 2010 TABLE 1

Platform	Owners	Lit / dark[1]
LSE	LSE Group plc	Lit / hidden order
Chi-X (MTF)	Investment bank, proprietary trading firms and broker consortium	Lit / dark
BATS (MTF)	Investment bank, proprietary trading firms and broker consortium	Lit / dark
Turquoise (MTF)	51% LSEG and banks	Lit / dark
Neuro (MTF)	Nasdaq OMX	Lit / dark
NYSE Arca Europe (MTF)	NYSE Euronext subsidiary	Lit
Liquidnet (MTF)	Private equity	Dark
Smartpool (MTF)	NYSE Euronext and brokers (JP Morgan, HSBC and BNP Paribas)	Dark
Nomura NX	Single broker (Nomura)	Dark
ITG Posit	Independent	Dark
Equiduct	Börse Berlin, Citadel and Knight	Dark
Instinet Blockmatch	Single broker (Nomura)	Dark (block-trades)
UBS MTF	Single broker (UBS)	Dark
ICAP BlockCross	Single broker	Dark (block-trades)

Source: *UKCC, BATS Global Markets, Inc / Chi-X Europe Limited merger inquiry.*

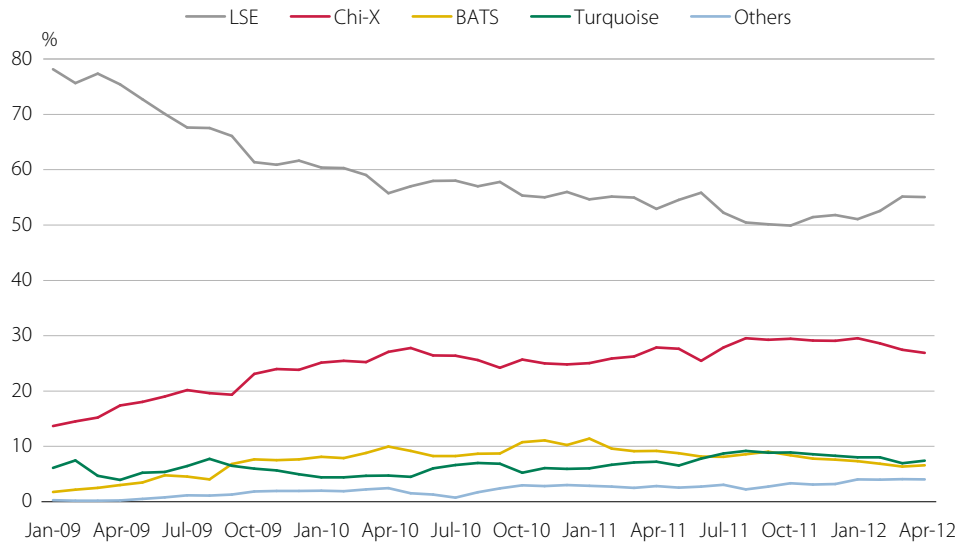
1 "Lit" indicates that it is a market with pre-trade transparency and "dark" indicates the opposite.

Most of the trading platforms referred to in table 1 are relatively new even though some of them have managed to achieve a considerable market share. In particular, this has been the case of the two MTFs whose merger was studied by the UKCC: Chi-X and BATS. In April 2012, the former had a trading share of over 25% among

the securities included in the FTSE 100 and FTSE 250 indexes i.e. among the most liquid equity instruments in the UK market. At the same date, BATS had a market share of close to 7%.

Therefore, Chi-X and BATS have become the main competitors of the historic regulated market, the London Stock Exchange (LSE), whose trading share in the most liquid securities in the UK market fell from 80% in January 2009 to an average of 52.3% in 2011. It is important to point out that the LSE, so as to compete with these platforms, acquired an MTF – Turquoise – which initially operated as an independent entity. As shown in figure 1, Turquoise had the third largest share of equity trading (7.4%) as at April 2012.

Share of trading in FTSE 100 and FTSE 250 securities markets. Lit and dark books FIGURE 1



Source: BATS.

2.2 Determining the relevant market

In anti-trust legislation, the legal and economic concept of relevant market is essential for any decision making. This concept is based on determining whether the goods and services offered by different companies are regarded by the consumer as sufficiently substitutable. If this condition is met, the data of these products and the supplying companies must be taken into account when analysing positions of dominance and the ability of customers to protect themselves from possible reductions in competition by buying from other companies.

Therefore, the UKCC studies whether the services offered by the trading platforms with pre-trade transparency, that is, with transparency requirements relating to the phases of the transaction prior to trading, compete with other trading methods, such as systems without pre-trade transparency or transactions performed outside a market. It also analyses whether the competition of other European trading platforms is sufficiently implemented in the United Kingdom so that they are close

substitutes. Its conclusion is that, despite a certain ability to substitute between the services and suppliers, the ability to substitute is not strong enough for the possible merger between the MTFs not to require the supervision of the UK competition commission.

2.2.1 Different types of securities trading

Both BATS and Chi-X are MTFs which offer trading through lit order books, although without performing auctions, and through dark order books. However, these two are not the only types and, therefore, investors and intermediaries also have access to other ways of exchanging financial securities. In particular, they can use the off-book market, which the UKCC identifies for practical purposes with OTC transactions or those performed through systematic internalisers.

In order to determine the competitive pressure of the different types of trading on the order platform market, the purpose of the inquiry, the UKCC collected information on the customers of the different potentially competitive systems.

With regard to dark book trading, in accordance with the information collected by the UKCC, the main advantages for investors and their intermediaries are that the buyer and seller avoid paying the market's bid-ask spread, the impact of large transactions on the market is reduced and there is the possibility of delaying post-trade reporting. Disadvantages indicated are that the fee to be paid to the service provider is usually higher than lit book trading and that there is uncertainty on the time period for execution.

The UKCC's conclusion is that the choice of an investor or its intermediary between lit and dark trading depends on the nature of the customer and the transaction which it aims to execute. It also considers that the limits between both types of market are indistinct, especially given the increasing use of smart order routes. At any event, given the relatively low volume of dark book trading, it does not consider that the competitive pressure which it exercises on platforms with lit book trading is enough to be taken into account in its decision on the merger.

With regard to off-book trading, the UKCC faces a problem relating to the lack of evidence on the volume of this type of trading and also on the nature of this type of trading. For practical purposes, it considers that this type of trading corresponds to transactions carried out on the OTC market and those carried out through systematic internalisation.

With regard to the reasons why users perform off-book trading, the UKCC considers that they are very similar to those mentioned for the case of dark book trading, also highlighting: (i) when the trade is of a large size it makes it possible to maximise execution certainty, (ii) it minimises a trade's impact on the market, and (iii) it can in some circumstances be less expensive given that there is no need to use a central counterparty if the trade is a bilateral agreement.

The UKCC also considers that off-book trading is not sufficiently important, in quantitative terms, to be considered as part of the relevant market in its report.

2.2.2 European competition

The UKCC also analyses the competition which other European regulated markets and MTFs may have on the UK MTFs subject to the possible merger. The UKCC indicates that one of the central objectives of the MiFID was to achieve greater integration of European securities markets, promoting competition between the different types of platform, including MTFs, and at the same time harmonising essential aspects of investor protection.

The UKCC considers that both BATS and Chi-X apply a uniform fee to all the securities traded on these platforms, irrespective of their country of origin and even if they have offered temporary promotional reductions in fees for securities issued in specific jurisdictions. It also indicates that the customers of these platforms operate from a pan-European perspective, that the European markets operate platforms in different jurisdictions and that it is expected that competition between markets will increasingly take place on a European, as opposed to a national, basis.

The MTFs analysed in the merger have achieved a significant presence in the shares with highest capitalisation at a European level. In table 2 we can see that, in 2011, Chi-X was the platform with greatest penetration in the trading of blue chips included in the main European indexes. Other UK MTFs, such as BATS and Turquoise, also reached a noteworthy penetration, especially taking into account the short period of time they have been operating. It should be noted that, among national markets, the Spanish stock market was one of those with the lowest presence both of these MTFs and of other foreign operators.

Share of trading[1] of main European indexes in regulated markets and MTFs. 2011 TABLE 2

%	Stoxx 50	FTSE 100	DAX	CAC 40	MIB	Swiss MI	AEX	Ibex 35
LSE	11.4	52.3	0.0	0.0	0.0	0.0	0.0	0.0
Xetra	14.7	0.0	66.6	0.0	0.0	0.0	0.0	0.0
Paris (Euronext)	8.9	0.0	0.0	60.7	0.0	0.0	3.8	0.0
Milan (LSE)	7.2	0.0	0.0	0.0	80.3	0.0	0.0	0.0
SIX Swiss Exchange	9.2	0.0	0.0	0.0	0.0	66.0	0.0	0.0
Amsterdam (Euronext)	3.4	0.0	0.0	3.3	0.0	0.0	59.5	0.0
BME	8.1	0.0	0.0	0.0	0.0	0.0	0.0	97.9
Chi-X	20.8	28.3	21.7	21.9	11.3	19.4	23.8	1.7
BATS	6.4	9.2	5.7	5.4	4.9	7.4	6.0	0.1
Turquoise (LSE)	5.3	7.8	4.8	6.1	2.8	5.7	5.2	0.0
Others	4.6	2.4	1.3	2.7	0.6	1.5	1.7	0.3

Source: BATS.

1 Considering trading in both lit and dark markets.

At any event, when taking a decision on the proposed merger of Chi-X and BATS, the UKCC does not take into consideration the existence of these other European markets. It explains that for the potential UK customer, the subject of its protection, European markets are not a sufficiently close substitute for the markets located in the United Kingdom and that therefore it must conduct the report on whether to authorise the merger or not.

3 Prices and services of the trading facilities

3.1 Price of the services

Regulated markets and MTFs obtain their revenue by charging for certain services. The UKCC lists the following tariffs: fees for executing trades in the market, specific fees for certain types of order, flat fees for access to the market and tariffs for real--time access to market data.

The main source of ordinary revenue is from the fees charged in lit markets. In this case, it should be pointed out that there has been a significant change in recent years, as in the past the fees were usually charged to both parties involved in the transaction, as the LSE continues to do, whereas MTFs have established maker/taker structures. In these structures, the fee is only levied on liquidity takers entering an order in the market which takes liquidity from the book against limited orders, entered by the other party – the liquidity maker. The latter receives a rebate, lower than the payment made by the liquidity taker, which compensates its activity as liquidity maker. This new fee structure is the result of the desire of the new MTFs to attract liquidity, as will be seen later in section 5.

The UKCC highlights that, faced with this situation, the LSE reacted by introducing a new fee structure which, without actually introducing rebates, provides for a differentiation in the price according to the value traded by the customer. Consequently, for customers with major activity, the prices of the LSE are close to the prices of the MTFs, while for other less active customers, the market charges higher fees. In addition, the LSE maintains these prices because it operates in some segments of the market in which it does not compete with MTFs, such as opening and closing price auctions, which are used even by MTF customers in order to close positions, or in relation to a large number of listed companies (around 2,600), for which the new platforms do not currently offer order books.

The three MTFs analysed in the UKCC report (BATS, Chi-X and Turquoise) charge fees which do not depend on the total trading volume of the customer and which are based on the maker/taker scheme. In the declarations of the first two MTFs to the UKCC, they state that their main competitor is the LSE and that their strategies are not established so as to compete with each other, a statement which the regulator does not share.

This mechanism, therefore, makes it possible to attract the most active customers through a price discrimination strategy. As indicated, the LSE reacted to this strategy by establishing fees which make it possible to enhance the appeal of its platform for the most active investors in the securities which can also be traded on the MTFs.

In order to analyse this change, the UKCC report offers information on the current fees of the LSE and the three most active MTFs in the United Kingdom. The panel on the left of figure 2 shows the average cost in basis points of the monthly trade through transactions in which liquidity has been taken or market transactions, and the panel on the right shows the cost (or revenue) for the transactions in which liquidity has been offered or limited transactions. In both cases we can see the SVTS (scaled by value trades scheme) fee, which is the ordinary fee of the

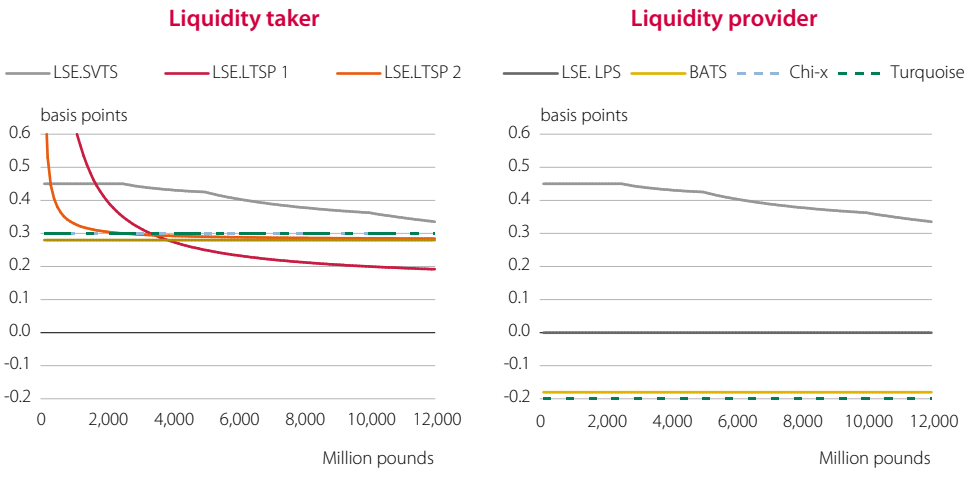
LSE both for liquidity taking and for liquidity making, and how said average fee falls as activity increases.

The above fee for liquidity takers would only be competitive in comparison with the MTFs as from very large volumes of monthly trading. Therefore, the LSE establishes two specific schemes for operators which usually take liquidity. These are the Liquidity Taker Scheme Packages 1 and 2, which appear in figure 2 as LSE.LTSP 1 and LSE.LTSP 2. Both establish a flat monthly fee and a variable payment which is very competitive if compared with those of the MTFs. In fact, for monthly trading volumes greater than 3.8 billion euros, the LSE. LTSP 1 fee is cheaper than that of MTFs liquidity takers.

The LSE establishes a special fee for liquidity providers – the liquidity providers scheme (LPS) – through which the customer is not charged for these transactions provided that 75% of all those transactions performed on its own account in FTSE 350 shares can be considered of this type.

MTF systems are simpler as their marginal payment and collection is independent of the volume and exclusively defined through the taker/maker scheme. Consequently, the three most active MTFs obtain their revenue from liquidity takers while they subsidise their counterparties (liquidity makers). In the three cases, the difference between the payment and the charge is 0.1 basis points, which is the gross revenue for the MTFs.

Average monthly fees depending on monthly value traded. Basis points with regard to value traded FIGURE 2



Source: UKCC.

LSE. SVTS: Ordinary fee of the London Stock Exchange. LSE.LTSP 1: Liquidity Taker Scheme Package 1, with a subscription fee of 50,000 pounds and 0.15 bp of the value of transactions executed. LSE.LTSP 2: Liquidity Taker Scheme Package 2, with a subscription fee of 5,000 pounds and 0.28 bp of the value of transactions executed. LSE.LPS: Liquidity Provider Scheme, in which no fee is charged providing own account passive trading exceeds 75% of the total value of trading.

The LSE charges a flat annual fee to be a market member. This fee is set at 12,500 pounds, although 2,500 pounds may be applied to discounts for the payment of other services. None of the MTFs analysed charges a flat fee.

The UKCC indicates that competition has not only led to price reductions but also to improvements in the services provided. Both BATS and Chi-X opted from the start for technological enhancements focused on facilitating the execution of trades by their customers and the provision of a series of ancillary services. In particular, a significant effort was made in improving the latency or speed of trading facilities to accept, process and execute orders. New ancillary services are also mentioned, such as re-routing unexecuted orders to other markets.

The LSE has also reacted to this competitive pressure by improving its technology through the acquisition of systems which reduce latency and offer new services. Furthermore, this regulated market acquired 51% of the capital of the Turquoise MTF so as to access a market already in operation with these characteristics and one which provided a stock quote service for shares from throughout Europe.

3.2 Other services and costs associated with trading

The UKCC also details other services and costs for the customer associated with trading shares which must be considered when analysing this market, and which it classifies as pre-trade and post-trade costs. The pre-trade costs form part of the business of the MTFs analysed as they are costs for illiquidity (the spread between bid and ask prices) and for obtaining market data. The post-trade costs do not form part of the said business as they are those relating to clearing and settlement.

As will be explained in section 5, the main objective of the customers of the services of trading platforms is to achieve the greatest liquidity possible. However, operators of trading platforms cannot provide this liquidity directly, but rather have to do so indirectly by attracting the greatest number of customers possible. At any event, the UKCC highlights the importance of this liquidity cost as it considers that this spread or cost of execution is several times higher than that charged by the MTFs for executed trades.

Another cost for customers which in this case may involve a source of revenue for the MTFs is the sale of market data. In the United Kingdom, the LSE charges those who access market data in real-time. Of the MTFs analysed, only Chi-X charges for this service, although solely for redistributing its own data to third parties which are not direct customers.

With regard to clearing and settlement services, the report states that these have historically been structured from a national perspective. The MTFs aiming to merge state that their main interest is to achieve full interoperability of the existing systems in Europe. Accordingly, Chi-X states that it will achieve this for all the clearing entities except for the Spanish market.

4 The behaviour of customers of MTFs and regulated markets

Within the analysis on the effects of the merger of the two aforementioned MTFs on competition, the UKCC dedicates a significant part to studying the behaviour of

customers, investors and brokers in said MTFs so as to analyse whether they have the capacity to react in order to protect themselves against anti-competitive practices, especially through switching to another supplier.

Even though it does not provide explicit data for reasons of confidentiality, the UKCC explains that the three MTFs which have achieved a significant share of the trading of UK shares – Chi-X, BATS and Turquoise – have a common customer base, which includes the most active operators in the markets and which are very important for each one of these trading platforms. In this regard, the UKCC highlights that any of these customers can change market relatively easily in the event of anti-competitive practices, such as an increase in fees, a fall in the quality of the services provided or other problems which makes them less attractive. However, the UKCC indicates that the LSE has a much more diversified customer base, many of which are only customers of this regulated market.

Furthermore, the relatively large customers of these markets have an additional power to that which they would have in other types of goods and services due to the presence of network effects. If a relatively important operator ceased to operate on one trading platform, this could make the affected trading platform less attractive for other customers in the market creating feedback loops.

At any event, the UKCC highlights that the customers interviewed do not show significant concern about the analysed merger and that some of them are in favour. This is because they consider that the merger will ensure the financial viability of the resulting MTF and the existence of at least a duopoly, while their main fear lies in the possibility that a monopolistic situation may be restored, as was the case prior to the MiFID.

From the interviews and surveys performed on the customers of these markets, the UKCC describes how customers choose the market in which they will perform their transactions. The description can be separated into two parts: (i) how they decide which markets to be connected to for their possible use and (ii) from among the markets to which they are connected, which they will send their purchase and sales orders to, as explained in detail below.

4.1 The decision about which market to send orders to

When the customer of these markets acts as an intermediary, the MiFID requires that they apply the best execution principle, which requires it to take all reasonable steps to obtain the best possible result for its clients taking into account price, costs, speed, likelihood of execution and settlement, size and nature of the order or any other consideration relevant to the execution of the order.

In this regard, the main intermediaries apply smart order routes (SOR) when they are connected to more than one market in which they may execute a customer order and, in general, also when they operate on their own account. These algorithms weigh up different criteria such as the price of the financial asset, the execution cost, available liquidity and market latency.

The UKCC includes information on the SOR. It observes that most investment banks have developed their own algorithms and that the smallest participants have bought those developed by third parties, such as Fidessa and Sungard.

In accordance with the above, the UKCC concludes that making conditions tougher for the customer resulting from the merger in any of the markets would almost automatically lead to the transfer of many of the transactions to other trading platforms. Given that this would reduce liquidity in those platforms which had increased their prices, this movement would lead to a feedback loop. This imposes an additional constraint on the ability of these platforms to take advantage of a reduction in competition.

4.2 The decision about which markets to connect to

The full connection of an intermediary or an investor to one of these platforms or markets is a costly decision. This is not due to the traditional flat fee for being a member of a regulated market, such as the LSE, as the MTFs do not charge a flat fee. The main cost to be taken into account in the connection results from the need to develop or adapt the computer applications, in particular the trading platforms and SOR, to establish the connection with said markets. Some users interviewed by the UKCC estimate the cost at between 200,000 and 500,000 dollars. One way of reducing these access costs for relatively small participants is to acquire the necessary software from specialised companies. The UKCC mentions that is possible that as many as 100 brokers were customers of Fidessa and used its SOR technology.

Given the importance of said cost and their nature as sunk costs, potential customers only connect to a new platform if the platform can demonstrate sufficient liquidity which will partly be based on its capacity to attract sufficient customers. Therefore, it may be considered that attracting customers generates network effects: each new customer leads to a positive externality for the participants, which, in turn, attracts new customers, as will be described in the following section.

5 The entry of MTFs in the market

Especially relevant for market regulators is the analysis which the UKCC conducts on the costs of entry in the trading platform market given that facilitating competition in this market, and consequently the reduction in the price of securities trading for investors, was one of the main objectives of the MiFID.

The UKCC highlights that the MiFID involved a substantial change with regard to the possibility of competition between trading platforms. It states that it reduced the incumbency advantage enjoyed by existing regulated markets and encouraged a competitive market in these services by abolishing the trading concentration rule established in the Investment Services Directive (93/22/EEC). Consequently, since the entry into force of the MiFID, there has been rapid growth in the number of secondary trading venues.

The UKCC highlights that the MiFID is currently under review but that the likely changes will be relatively small in the area of cash equities trading. The changes are expected to be concentrated on the derivatives trading platforms and in ancillary services, such as data dissemination. At any event, the UKCC considers that the likely changes will favour the competition of current MTFs and potential future market entrants.

In the appendices which accompany its report, the UKCC describes both the barriers to entry and the decision process for creating a new MTF. Its main conclusions are summarised below.

5.1 Potential barriers to entry and expansion

According to the MiFID, an MTF operator must obtain approval for its activity by the competent national authority, which in the case of the UK is the Financial Services Authority (FSA). The cost of FSA registration is 25,000 pounds and takes approximately six months.

Regulatory capital requirements are established for companies which operate the MTFs so as to foster their financial solvency. At any event, given that MTFs do not have to take a position in the assets which are traded on their platforms as they simply transfer matches to the central counterparty, these requirements are relatively low and are determined by the operating costs and the working capital necessary to carry on their functions correctly, even in the case in which the operating revenue for service provision is much lower than expected. The ordinary operating costs include the costs of complying with legislation and collaborating with the supervisor and are expected to grow in relation to market trading.

According to the MTFs interviewed by the UKCC, entry in the market would have required an initial investment of between eight and ten million pounds and a new competitor would expect to obtain its first operating profit after two or three years. The percentage of these costs required to buy tangible assets is relatively low and so most of the expenses incurred are sunk costs, which can be considered as a deterrent to attracting competitors. The main initial cost for entry in this market is the design of the order matching engine, including the software and hardware related to the connections. A possible competitor in this MTF market may develop its own matching engine or obtain one from specialised suppliers.

A company which wishes to create a new MTF must design and build a suitable infrastructure to operate the trading exchange, adding the necessary ancillary services, such as information to the market, mandatory reports, customer billing, etc. This system can currently be developed more cheaply and with less uncertainty than in the first few years that the MiFID was in force, taking advantage of the existing experience and by purchasing from experienced suppliers.

5.2 Economies of scale and network effects

The main problem faced by a company which decides to compete in the MTF market is the presence of strong economies of scale and network effects in this market.

The structure of strong sunk costs means that average costs fall sharply as the volume traded in the market increases. This is due to the fact that most of the costs (technology and staff) do not increase as the volume traded in this market increases. In fact, the UKCC considers that it is precisely these economies of scale which are shown in the significant synergies expected from the merger of BATS and Chi-X. They expect that joint costs will fall by between 26% and 50% compared with the two companies taken separately. Most of the savings will take place in staff costs.

The network effects in the MTF market are perhaps even more important as a deterrent to entry. The nature of the service provided, joining suppliers and demanders of shares, means that the higher the number of customers, the more attractive the service provided by the MTF for a given level of technical conditions and fees charged by the trading platform. This leads to the possible existence of positive feedback (entry) or negative feedback (exit) in attracting customers to an MTF.

In this regard, the UKCC asked several customers about the critical trading mass which must take place in an MTF for them to consider the possibility of connection, bearing in mind the aforementioned fixed costs of said connection and the fact that the financial intermediaries are obliged, as a result of the best exclusion principle, to consider the connection to those markets which, due to the volume, may be useful for complying with said legislative requirement. Among the customers consulted, one considers that a trading percentage in the UK market of between 4% and 6% would be sufficient for financial intermediaries to seriously consider the possibility of connecting to an MTF. As of the report date, only three MTFs (BATS, Chi-X and Turquoise) have exceeded this threshold in the UK market.

The strategies followed by the new MTFs to attract activity and overcome network effects can be classified into two types: the participation of liquidity makers in the economic profits of the platforms and the maker/taker tariff scheme.

The appearance of new MTFs was partly driven by brokers, intermediaries and consortiums. This is the case of the three MTFs mentioned above, those of greatest growth in the UK market. However, the stimulus resulting from participation in the profits of the platform has its limits as the brokers which act on behalf of a client, due to the best exclusion principle, cannot indiscriminately direct transactions to those MTFs in which they have an interest as a result of their shareholding.

Furthermore, some of the testimonies collected by the UKCC indicate the reason why brokers and intermediaries supported the creation of new MTFs was not solely to participate in the profits generated by the provision of their services. In particular, in the case of Turquoise, it is expressly mentioned that a supporting objective of the intermediaries was to pressurise the LSE to lower its fees.

In addition, the MTFs aim to design their fees so as to attract liquidity makers which perform a key role in strengthening positive network effects, as commented above. By means of the maker/taker system, those who provide liquidity by entering limited orders which are subsequently executed receive payment from the trading platform instead of having to pay for these services. In fact, the report states that some customers of BATS receive net payments from this MTF for the transactions which they perform.

5.3 Promoters and strategies

The UKCC has analysed the MTFs and other platforms which manage order systems which have been created in the United Kingdom, who developed them and what their strategy is.

Of the cases studied, the founding members of the three MTFs which have obtained greatest share in the UK market (Chi-X, BATS and Turquoise) were investment banks or other large financial institutions which are regular users of trading platforms. In contrast to what could be expected, the other cases analysed, which are relatively less successful (Baikal, Nasdaq OMX Europe, NYSE Arca Europe-Neuro and Quote MTF) were founded by market operators.

In its responses to the UKCC, the Nasdaq OMX Europe-Neuro platform, which stopped operating in July 2010, makes an interpretation in line with the points mentioned in the previous paragraph. It states that Chi-X and BATS benefited significantly from having shareholders which were participating companies in its platforms, as well as from the resulting flow of trading.

Although the UKCC does not make an assessment of this aspect, the probability of success of these MTFs seems to be related to their early introduction. This could be related to the network effects mentioned above or the appearance of the financial crisis. For example, Chi-X began operating in March 2007, BATS in October 2008 and Turquoise in August 2008.

Furthermore, and given the operating leverage generated by the aforementioned economies of scale, it is important to highlight the need of these MTFs to become markets for the most liquid European shares. As shown in table 2, the MTFs cover a geographically disperse business area, while the business of regulated markets remains concentrated in their home country.

6 Some conclusions relevant for the regulation of securities markets

The report drawn up by the UKCC highlights the success of the MiFID in promoting competition in the trading platforms market in the United Kingdom. According to the UK competition regulator, this Directive changed the current panorama in which a regulated monopoly, usually national and under mutual ownership, accounted for almost all trading in the cash equity market.

Liberalisation has had consequences for the direct customers of trading facilities and consequently for investors which use their services. Accordingly, the competitive pressure has led to a fall in the fees paid both in the new platforms and in the previously existing platforms, but has also led to the ongoing improvement of the technologies used.

Although it is not part of the analysis conducted by the UKCC, as it does not fall within its geographical scope, this agency highlights that the pan-European focus of

the new MTFs is accelerating the construction of an integrated European equity market. The high operating leverage of these platforms resulting from the sunk and fixed costs which they incur raises the need to increase the trading volume, stimulating their growth at a European level and not only in the UK.

It is also important to consider that the MTFs do not provide all the services which are necessary in the area of trading and, therefore, they cannot be considered from the point of view of securities market regulators as a substitute for the current regulated markets. Firstly, these trading platforms are focused on providing a service for buying and selling the most liquid shares, but they do not provide trading services for shares issued by other smaller companies, unlike regulated markets. Secondly, there are necessary functions for correct price formation and orderly market functioning which can only be carried out within the scope of regulated markets, such as opening auctions, the close of the session, volatility and other procedures linked to the primary market.

Finally, the appearance of multiple competing MTFs in the United Kingdom cannot be easily extrapolated to other Member States of the European Union. Firstly, the securities market in the United Kingdom has traditionally been the largest and most sophisticated in the European Union, which facilitates the appearance of competitors in said market. Secondly, even in the best conditions mentioned above, the size of the market may not be sufficient so as to have a large number of competitors, as can be deduced from the comments of some of the customers interviewed, whose main argument in favour of the merger between Chi-X and BATS is that the merger will ensure the existence of at least a duopoly.

III Regulatory Novelties

Regulatory principles driven by IOSCO on Collective Investment Schemes

Verónica Grandón Labbé (*)

(*) Verónica Grandón Labbé belongs to the CIS and Venture Capital Firm Supervision Department of the CNMV.

1 Introduction

IOSCO (International Organization of Securities Commissions) is the benchmark multilateral body in issues relating to the development and implementation of regulatory and supervisory principles and standards in securities markets. Its members include the regulatory bodies of securities markets in numerous countries, including the CNMV.

In accordance with its objectives and principles, IOSCO makes recommendations aimed both at developing legislation in different jurisdictions and at establishing good practice principles. In order to carry out this work, IOSCO has established a series of Standing Committees. In particular, this article refers to the latest proposals developed by Standing Committee 5 (hereinafter, SC5), which are aimed at collective investment schemes (CIS). In most cases, the recent proposals from IOSCO Committees have been the result of problems or issues arising from the current financial crisis.

Firstly, this article refers to the document approved in January 2012, *Principles on Suspensions of Redemptions in Collective Investment Schemes*, which establishes the basic principles for CIS operators to take into account in terms of liquidity so as to avoid a suspension of redemptions and, in the event that it is not possible to avoid the suspension, to ensure that the suspension process is carried out in an orderly and fair manner for unit-holders.

In addition, this article presents the main points contained in another four documents which IOSCO has submitted for consultation in 2012. The first document, *Principles for the Valuation of Collective Investment Schemes*, put forward for consultation in February, establishes the criteria for correct valuation of assets in the portfolio of CIS. The second document, *Principles for the Regulation of Exchange Traded Funds*, put forward for consultation in March, includes a series of recommendations so that investors in exchange traded funds (ETFs) are clearly informed about their features. One month later, IOSCO published *Principles of Liquidity Risk Management for Collective Investment Schemes*, with recommendations to avoid the consequences which would be generated in a liquidity crisis in CIS. Finally, also in April 2012, IOSCO issued a document entitled *Money Market Fund Systemic Risk Analysis and Reform Options*, which proposes different measures to underpin the robustness and safety of these products so as to prevent effects on other securities markets.

The rest of the article is organised as follows. Section 2 summarises the key points of the document approved in January relating to the suspension of redemptions, while section 3 summarises the four documents which are in the consultation stage. The article closes with a summary and conclusions section, with reference to the implementation in Spain of the measures proposed by IOSCO, which have mostly already been introduced into Spanish regulation.

2 Principles on suspension of redemptions in CIS[1]

In the context of the current crisis, some open-ended CIS in various countries have had to face problems in meeting their periodic redemption obligations. In numerous cases, the operators have seen how the closure of markets, the impossibility of liquidating the portfolio investments of the CIS, the difficulties in valuing assets or the existence of significant redemption requests have led them to suspend redemptions. As a result of this situation, IOSCO created a working group with the aim of drawing up a study on different criteria on suspension of redemptions found in different legislations. Problems of suspension of redemptions are closely linked to the liquidity management process, on which IOSCO is developing principles which are currently in the consultation stage and which are referred to later in this article. Due to this interrelation, when drawing up the principles of suspension of redemptions, the different criteria on required liquidity and information to be provided to investors have been taken into account.

The principles developed by IOSCO relating to the suspension of redemptions in open-ended CIS take into account the fact that the responsible entity[2] must manage the liquidity of the CIS so as to attempt to avoid reaching a possible suspension of redemptions. Redemptions in open-ended CIS are a basic right of investors and their suspension involves a risk for small investors, which undermines the trust and reputation of the CIS. In this regard, depending on the size of the CIS, the suspension of redemptions may lead to significant effects on market functioning.

The principles which IOSCO has developed are applicable both to CIS aimed at small investors and CIS aimed at institutional investors, and must be complied with in any event, irrespective of whether the CIS is self-managed or managed by a third party.

The principles are divided into six sections based on the timeframe of the CIS. The first section is dedicated to management of liquidity risk, for which the management company must establish, implement and maintain a suitable liquidity management process and policy.

The management company must ensure a level of liquidity in the CIS which allows it to meet redemption requests in particular and its obligations in general. In addition, the redemption frequency of the CIS should reflect the overall liquidity of the CIS's portfolio and *vice versa*.

Some jurisdictions have an explicit definition of the assets which may be included under the concept of liquidity and establish a minimum percentage of net asset value of the CIS. Another tool which is mentioned in the IOSCO document is the possibility of borrowing to facilitate redemption requests, although this tool should be considered as extraordinary as it is not an appropriate way to manage liquidity risk.

---

1 *Principles on suspensions of redemptions in collective investment schemes- Final report*, available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD367.pdf.

2 In the case of Spain, this refers to the management company, unless they are self-managed companies. In the document and hereinafter, the term "management company" will be used.

In addition, the management company should take into account, before and during investment, the level of liquidity of the assets and instruments in which it invests, their effect on the overall liquidity of the CIS, and whether they are in line with the general liquidity profile of the CIS.

The second section refers to the need for ex-ante disclosure to investors (in the CIS incorporation documents and/or prospectus) about the possibility that redemptions may be suspended in exceptional circumstances so that unit-holders are aware of this risk.

The third section refers to the fact that the suspension of redemptions may only be justified in exceptional circumstances where permitted by legislation and when it is in the best interest of the unit-holders or directly required by law or by regulators. In the first case, some of the exceptional causes which could lead to suspension of redemptions are exchange closures (if this means that a significant part of the CIS' portfolio cannot be priced or that the closure means that it is impossible to meet the redemption requests), unforeseeable liquidity issues or operational or technical issues, catastrophes or natural disasters, etc. The document also indicates that in the event that the suspension results from poor management, the competent authorities should take the necessary measures against the persons responsible for breaching the rules.

At any event, the suspension of redemptions should be limited to extreme cases and should be executed in a fair and equal manner for all unit-holders in the CIS.

According to the fourth section, the management company should have the operational capability to suspend redemptions in an orderly and efficient manner. To this end, it should have in place processes and procedures to react immediately in the event of a suspension of redemptions. Such emergency plans should include the communications and interactions that would be held with third parties in those circumstances, such as regulators, depositories and intermediaries, and should include an investor communication plan. The management company should also be prepared to deal with queries from investors and other parties that might have to intervene after a suspension.

When a management company is considering the decision to suspend redemptions, it should analyse the situation after ruling out all other possibilities and always taking into account that it should ensure fair and equal treatment among unit-holders, and avoid conflicts of interest.

The fifth section indicates that during the suspension of redemptions, the management company should not accept new subscriptions. However, there may be exceptional situations in which the net asset value of the unit in the CIS can be calculated reliably and objectively. However, in these cases, potential investors should be informed of the suspension of redemptions prior to the subscription and be given a chance to cancel the subscription order.

Throughout the suspension period, the management company must keep the competent authority and unit-holders informed and normal operations should be resumed as soon as possible, informing the authority and unit-holders immediately.

The final section of the IOSCO document offers some examples of alternative measures to deal with illiquidity which exist in some countries and which might avoid total suspension or at least allow it to be partial. These include establishing gating mechanisms to restrict the amount to be met on each redemption date and which might consider, for example, a maximum percentage of total assets to be redeemed (gates). If the redemption requests exceed the established limits, the redemption orders will only be partially executed. The remaining orders will either be denied or postponed and executed on the next redemption date. Another measure would be to establish side pockets, which are compartments established within the original CIS or another CIS which is created for this purpose and to which the liquid assets are transferred in such a way that the redemption is carried out on the liquid part of the CIS, while the remaining part is redeemed as the illiquid part of the portfolio is liquidated. Another possible suggested option is to apply a discount to redemption requests in extreme market situations or in the event of significant redemption requests. These discounts, which should be applied to all redemption requests on the same day, guarantee certain liquidity and at the same time, due to their potential deterrent effect, they benefit the unit-holders who decide to maintain their investment in the CIS.

3 Documents in the consultation stage

During the course of 2012, IOSCO has put forward four documents for consultation related to CIS (in addition to the already approved document which has been commented above). Except for the document relating to ETFs, the justification for the remaining documents arises from issues resulting from the financial crisis, as is the case with the aforementioned document on suspension of redemptions in CIS.

3.1 Principles for the valuation of CIS[3]

It is essential that open-ended CIS properly value their assets, taking into account that they are subject to periodic subscriptions and redemptions. If those subscriptions and redemptions are made at a net asset value which is incorrectly valued, incoming, outgoing or ongoing unit-holders will be negatively affected. For example, if the net asset value is overvalued, performing the redemption at that price would lead to the outgoing unit-holders taking part of the assets which in reality belong to the ongoing unit holders in the CIS. Redemption at an undervalued net asset value would lead to the outgoing unit-holders redeeming a lower amount than they are entitled to.

Correct valuation of the assets of the CIS is also important when calculating the fees to be paid (to the extent that these values are used as a benchmark for calculating fees) and for issuing opinions on the development of the entity (as the valuation determines the performance of the vehicle).

3 *Principles for the valuation of collective investment schemes - Consultation report*, available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD370.pdf.

Although IOSCO had already laid down some valuation principles and guides for CIS in general and the portfolios of hedge funds in particular, the changes that have taken place in markets and the increase in the range of instruments in which CIS may invest has led IOSCO to update and review the valuation principles. Following this idea, a document was put forward for consultation which includes a draft with the initial principles which have been drawn up. These principles are conceived as a practical guide to be taken into account by regulators and professionals that participate in securities markets.

Specifically, the principles start from the fact that the CIS management company should establish comprehensive, documented policies and procedures to govern the valuation of assets held or employed by a CIS. Those policies and procedures should identify the methodologies to be employed in the valuation of each asset. Whenever possible, assets should be valued at current market prices, although sometimes it may be necessary to use alternatives, such as when a security is traded infrequently or when it is traded in illiquid markets. Therefore, it is necessary that the entity should have specific valuation systems with personnel that have a suitable level of knowledge, experience and training. In these cases, the management company should monitor liquidity in markets, bearing in mind that the more illiquid such markets are, the more robust the valuation process needs to be.

The valuation procedures and policies should take into account the conflicts of interest which may arise. A conflict of interest which is indicated in the IOSCO document is that which may arise with illiquid or complex assets that are hard to value and in which the CIS management company is the most reliable or the only source of information about pricing a particular asset. In this case, if, for example, fees are calculated based on the value of the assets, the manager may have an incentive to overvalue the assets.

Several alternatives are proposed in order to address conflicts of interest, such as the risk management function of the CIS reviewing the valuation provided by the CIS manager, so that the risk management function and the portfolio management function are separate and independent. Other alternatives include the depositary reviewing the valuation procedure or the manner in which is implemented, or for independent expert valuations to be requested.

The policies and procedures which are established must make it clear that the assets are to be valued consistently in accordance with the designated methodologies and, in any event, they should be consistent across similar types of assets and across all CIS that have the same management company. However, there may be cases in which the general methodology applied is not the most appropriate for a specific asset and other methodologies need to be used, such as in the case of alternative investment funds. The procedures and policies should include exceptional circumstances and refer to the actions to be carried out in these cases, including the requirement to document the reason for the price override and that said price overrides should be reviewed by an independent third party.

The procedures and policies should include ways to prevent and detect pricing errors. Pricing errors that result in material harm to CIS investors should be addressed promptly, and investors fully compensated.

The management company of the CIS should carry out periodic reviews of the valuation procedures and policies to ensure that they remain appropriate and that they are being implemented effectively, and the valuation process should be reviewed by a third party at least annually.

In turn, the management company of the CIS should conduct initial and periodic due diligence on third parties that are appointed to perform valuation services so as to verify that the service provider has the appropriate human and technical resources necessary to carry out the tasks. It is important to bear in mind that the entity is responsible for overseeing the provider in connection with the services it has been asked to perform and, at any event, it retains responsibility and liability for valuation of the assets.

The arrangements between the management company and third parties for the valuation of the assets should be disclosed appropriately to investors in the prospectus, the periodic public information or another alternative method which allows transparency. The aim is to provide transparency to general issues about the method to be used in the valuation of certain assets, the frequency with which they are valued and, in addition, that said information is updated every time there is a modification.

The principles also include reference to the fact that subscriptions and redemptions of units in CIS should be carried out at an unknown net asset value, so as not to affect the value of the CIS. Fair treatment between CIS unit-holders means that a subscription or redemption order is applied at a net asset value which is not known at the time the order is made, but which is calculated after the order is made.

It also proposes that the CIS' portfolio should be valued on the days in which the CIS allows subscriptions or redemptions, as otherwise investors may purchase or redeem units at too low or too high a price.

Finally, it recommends that the net asset value should be made available to investors at no extra cost, which could be carried out through financial publications and websites (including the management company's website).

3.2 Principles for the regulation of ETFs[4]

The significant growth in ETFs has led regulators to be concerned about the potential impact of this product on markets and investors. Therefore, a document has been drawn up which includes a series of principles that aim to cover the key regulatory issues of ETFs relating to investor protection, correct market functioning and financial stability. These principles only cover ETFs in the form of CIS, and exclude other similar products, such as exchange traded products (ETPs). On drawing up the principles, IOSCO also takes into account other potential risks which may arise from ETFs as regards financial stability, the transmission of shocks to other markets or the effects on market integrity. The principles are grouped into three blocks: (i) ETF classification and disclosure, (ii) marketing and sales and (iii) structuring of ETFs.

4 *Principles for the regulation of exchange traded funds- Consultation report*, available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD376.pdf.

The first block (classification and disclosure) places emphasis on issues aimed at ensuring that the information provided to the investor clearly reflects the features of the product so that the investor is able to clearly differentiate it from ETPs and from traditional CIS, establishing the differences and similarities.

Furthermore, this information should clearly reflect the distinction between index-based and non-index-based ETFs and the possibility of direct redemptions by retail investors in the secondary market if this possibility is allowed. In general, ETFs shares are not redeemable from the ETF except by authorised participants (AP) in large blocks called creation units, and then, these AP can trade these ETP shares on secondary markets. However, there may be specific cases in which may redeem individual shares from retail inverstors charged to the fund's assets. These cases should be specified in the information offered to the unit-holder (for example, when the market maker cannot or does not want to act as counterparty in the secondary market).

The IOSCO document also emphasises the fact that the information which must be given to investors on the strategies and techniques used by ETFs should be understandable for the investor and should include the inherent risks so that the investor is aware of said risks. Accordingly, as the case may be, information should be given on the investments held in derivatives, securities lending agreements and, if OTC derivatives are used, information on the counterparty.

The information disclosed to the investor should include, as the case may be, that relating to the manner in which the ETF replicates the index, as well as the specific index and its composition. The investor should be aware of the technique used, which may be through a direct replication of the index, for example acquiring the full amount or a sample of the securities which it comprises (known as "physical replication" or "traditional replication"), or indirectly using derivatives (known as "non-traditional replication" or "synthetic replication").

If, on the one hand, information is provided on how the index is replicated, measures should be included, on the other hand, which indicate the level of replication achieved. For example, the tracking error provides quantification on the performance of the ETF in tracking its benchmark.[5] This makes it possible to measure the quality of the replication. For its part, the tracking difference measures the actual difference in yield between the CIS and the benchmark over a period of time.

In order to minimise the differences between the value of the shares of the ETF in the market and the net asset value, information should be disclosed on the ETF's portfolio at all times. Accordingly, should said differences exist, the authorised participants in the primary ETF market may carry out arbitrage activity so as to reduce the difference between the net asset value and the market price.

Finally, disclosure should cover the fees and expenses inherent to investment in ETFs, as well as securities lending and borrowing.

---

5 Specifically, it is measured in terms of the volatility of the differences in yield between a CIS and its benchmark. See, for example, Carlos Aparicio and Fco. Javier González Pueyo (2011), "Fondos cotizados: características y desarrollos recientes" [Exchange-traded funds: trends and recent developments], in the *CNMV Bulletin*, quarter IV. Available at http://www.cnmv.es/DocPortal/Publicaciones/Boletin/BoletinIV2011_ENen.PDF.

The second block of principles covers aspects relating to the marketing and sale of ETF shares. In this regard, all the material used by intermediaries, including oral presentations, should present a fair and balanced picture of both the risks and benefits of the ETF and should not omit any material fact or qualification that would cause such communication to be misleading.

In order to assess the disclosure requirements of an intermediary, regulators should consider who has control over the information which must be disclosed. This means that responsibility for providing ETF product information rests with the producer, while information relating to intermediary services will rest with the intermediary, although the following factors need to be considered: (i) the intermediary will be responsible if it provides or alters product information or when imposed by legislation (e.g. MiFID in the EU), (ii) in some jurisdictions the intermediaries are responsible for explaining the features of the product to a client.

Before recommending the purchase, sale or exchange of an ETF to a client, the intermediary should ensure that the product is suitable for the customer bearing in mind the customer's experience, knowledge, investment objectives, risk appetite and capacity for loss.

Within this block, the last principle refers to the need for the intermediary to establish written internal policies and procedures, which will include staff training, so that staff understand the products and suitably offer them to customers.

The third block on structuring ETFs includes: (i) the identification and treatment of possible conflicts of interest caused by ETFs, and (ii) the treatment of risks raised by counterparty exposure and collateral management.

With regard to the first point, the document indicates some specific conflicts of interest which may arise in respect of ETFs, such as when an index is created specifically for an ETF by a provider which is linked to the sponsor of that ETF. In this case, IOSCO proposes making the rules governing the inclusion and weighting of the securities in the index publicly available, limiting the possibility of changing the rules and giving a public notice before changes are made. It also proposes establishing firewalls between the staff responsible for the index and the portfolio managers, and that the entity responsible for index maintenance, calculation and dissemination (i.e. the calculation agent) should be independent from the index provider or, as the case may be, that there should be firewalls between both, and that the securities making up the index should not be changed more frequently than on a specified periodic basis.

ETFs can use various techniques which fall within the classification of so-called "efficient portfolio management techniques", which include, *inter alia*, securities lending. The use of securities lending may give rise to conflicts of interest when the securities lending agent is an affiliate of the CIS. In this case, the regulator should require the CIS management company to obtain quotes from non-affiliates or otherwise ensure that the fees are reasonable and that the services provided are equal to those which the agent provides to third parties.

Another conflict which is addressed is that which might arise when the number of authorised participants in the primary market is low and when one is affiliated to

the CIS with the ability to exercise pressure on the ETF provider to gain an order flow benefit. This conflict could have consequences for the ETF share price on the secondary market and the ability for investors to redeem ETF shares. The solution lies in establishing a minimum number of authorised participants, independence between the participant and the ETF and ensuring suitably formalised agreements with participants.

With regard to the second point, it is important to bear in mind that synthetic replication of the index through the use of OTC derivatives leads to a new risk: counterparty risk. For its part, ETFs may receive collateral in the form of securities or cash as guarantee for the transactions performed, and which require management of the collateral and consideration of the additional risks which emerge, such as from reinvestment of the cash. The IOSCO document indicates that regulators should impose requirements so that ETFs appropriately assess the risks which may arise as a result of exposure to counterparty risk, as well as those arising from collateral management. Regulators could require that ETFs have risk management procedures, including for counterparty risk, which establish limits with respect to exposure to the risk of one issuer in particular, and that checks and filters are established with regard to the assets which are accepted as collateral or that ETFs subject the collateral basket to diversification rules.

In addition, the document establishes principles aimed at mitigating some risks which are not exclusive to ETFs, but which affect other entities and products and which have an impact on financial stability. For example, the existence of extreme volatility of the ETF's underlying securities may hinder the valuation of the ETF itself. In this context, the market makers of the ETF may widen their quotes or stop providing liquidity until they can determine the reason for the volatility. In this section, the IOSCO document refers to the recommendations of its document relating to market integrity and efficiency, which establishes that trading venues have suitable trading control mechanisms in place, including interruptions. It also advocates applying to the ETF market the recommendation on the need to supervise the new types of market abuse or their variations which may arise as a result of technological developments and to take supervisory action as necessary.

Finally, the document refers to the potential risks on financial stability deriving from the increasing capacity and complexity of ETFs. However, IOSCO suggests that, as these risks are not exclusive to ETFs, they should be addressed from a broad perspective either by the Financial Stability Board (FSB) or by the Joint Forum.

3.3 Principles of liquidity risk management for CIS[6]

In the current context of the financial crisis, liquidity has taken on extreme importance. Although the regulatory reforms proposed in this area have been mostly aimed at the banking sector, the asset management sector has certain particular features which should also be taken into account when establishing policy recommendations

6 *Principles of liquidity risk management for collective investment schemes - Consultation report*, available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD378.pdf.

relating to liquidity risk. One of the defining features of open-ended CIS is the possibility for unit-holders or potential investors to redeem or subscribe the scheme's units. In order to carry out the redemptions, it is essential to have in place effective liquidity risk management.

There are various causes which might generate liquidity problems in a CIS and indeed the CIS management company may not be able to control some of them, such as those deriving from the unexpected closure of the markets in which the CIS has its investments. In extreme cases, liquidity problems may lead to a temporary suspension of redemptions. Therefore, the fundamental requirement of liquidity risk management is to ensure that the liquidity which a CIS holds allows it to meet both its general and its redemption obligations.

The principles which are specified in the document put forward for consultation by IOSCO are aimed at CIS management companies, although their implementation will depend on the legal structure existing in each jurisdiction. The principles are divided into two blocks depending on whether they are taken into account during the design period of the CIS and prior to its launch or during the daily management of liquidity risk.

Prior to the launch of the CIS in question, the design of the product should include an effective liquidity management process compliant with legally established liquidity requirements. This issue is essential, and as a basis for the other principles considered in the IOSCO document as prior to the launch of the CIS refer to factors which should be taken into account in the liquidity management process.

The factors to be taken into account in this process include the payment obligations in general and the redemptions in particular which the CIS will have to meet so that the liquidity ratios to be met are proportional to said obligations. In cases in which the legislation does not include specific requirements, the management company of the CIS should establish a realistic and objective redemption frequency, in line with its investment policy and valid in different market situations. For example, the establishment of a daily redemption frequency in a real estate CIS would obviously be unsuitable.

The CIS may also include in their design of the liquidity management process some exceptional measures or the use of tools which could affect the redemption process providing they are appropriate and acceptable for the CIS and the interests of investors. At any event, these measures and tools should only be used where fair treatment of investors is not compromised and when permitted by legislation. Some examples of measures and tools are the imposition of exit charges, redemptions in kind, notice periods or even the possibility of suspending redemptions.

Other issues to be considered and which affect liquidity management include the channels of distribution to be used (for example, the use of aggregated nominee accounts make it more difficult for the management company of the CIS to know the size and breakdown of individual unit-holders) and the information that the management company will be able to obtain (for example, when the CIS invests in another CIS, whether it is possible to have information about the underlying CIS' approach to liquidity management). Finally, the offering documents made available to

potential investors should include information on liquidity risk and the liquidity risk management policy.

Although there may be a general process applicable to all the CIS dependent on one entity, this process must be adapted to each one of the particular features of each CIS.

Once the liquidity risk management process has been designed and put into operation, the management company should ensure that it is performed and maintained throughout the time that the CIS exists, updating it when necessary. At this stage, it is necessary for the process to be carried out subject to suitable checks and supervision so that the information generated is fed back into the process as it is reviewed.

The management company should regularly assess the liquidity of the assets held in the portfolio, taking into account the time taken to sell the assets, the price at which liquidation could be affected, how long it takes to perform the liquidation in the sale, etc.

In addition, when taking investment decisions, the management company should take into account both the liquidity of the assets in which it aims to invest and the effect that said decision could have on the liquidity of the CIS during the lifetime of the investment. In other words, there is a need to integrate liquidity management in investment decisions.

The liquidity risk management process should facilitate the ability of the management company to identify an emerging liquidity shortage before it occurs and so take the appropriate measures with the aim of treating all investors fairly, as well as taking into account all the quantitative and qualitative factors. For example, statistical methods could be included which generate different data and scenarios depending on the conduct of investors and/or the performance of the assets of the CIS, or the management company should have information on the CIS' investor base, on those which have significant unit-holdings and whether they intend to make redemptions.

The management company should periodically perform, based on the type of CIS, liquidity simulations in different scenarios, including under stress situations, such as when mass redemption requests are made. The results of these simulations should in turn be used in developing and maintaining the liquidity risk management process.

Finally, the IOSCO document indicates that the management company should disclose the liquidity risks which the CIS has faced through the offering documents which it gives to investors. It should also inform them of the changes which it intends to introduce, for example a new tool or measure which could affect the investors' redemption rights or affect the CIS' investment policy or the establishment of side pockets. The management company should also be able to demonstrate that its liquidity risk management process works effectively, both to regulators and to unit-holders.

3.4 Risk analysis of money market funds systemic and reform options[7]

The final document put forward for consultation by IOSCO in the first few months of 2012 is related to the systemic risk of money market funds. In 2011, the Financial Stability Board asked IOSCO to carry out a study on the necessary regulatory reforms in money market funds so as to mitigate the potential for generating systemic risk. This potential derives from the possibility that money market funds have to value their portfolio assets at amortized cost, which allows them to have a constant net asset value. In the event of market turmoil, shareholders of money market funds may request mass redemptions if they doubt that the net asset value will be maintained or that it will not be kept constant. This situation could lead to a suspension of redemptions with an adjustment in the net asset value (to reflect the value at which the assets may be sold) or an entry of the sponsor so as to provide the necessary liquidity to meet redemptions.

The importance of money market funds in financial markets and, therefore, their potential to generate systemic risk is revealed by the fact that these types of funds bring together around 4.7 trillion dollars, accounting for almost 20% of total collective investment, spread mainly between the United States (2.7 trillion dollars) and Europe (1.5 trillion dollars). In addition, due to their features and volume, money market funds are an important source of liquidity and funding for the economy as their portfolios are made up of very significant quantities of short-term debt issued both by the public sector and by the private sector.

With regard to money market funds, IOSCO puts forward four options, which are not necessarily mutually exclusive, aimed at underpinning the strength and security of these investment vehicles.

Bearing in mind the problems generated by valuation at amortized cost, the first option is to require the calculation of a variable net asset value (which would involve prohibiting valuation at amortized cost of any asset in the fund's portfolio), or, alternatively, taking additional structural measures in the event that the net asset value remains constant. The aim will be to lower investor expectations that money market funds are impervious to losses, and the potential for heightened run risk when a fund fails to live up to those expectations.

The structural measures would be:

1. Creation of a capital reserve by retaining a portion of the fund's income, which could be used in the event of losses. At a time of crisis, the existence of that capital reserve (NAV buffer) would reduce the incentive for investors to run since there would be retained resources dedicated to mitigating a certain amount of losses.

2. Require private insurance to be taken out to resolve short-term cash shortages.

---

7 *Money market funds systemic risk analysis and reform options - Consultation report*, available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD379.pdf.

3. Conversion of money market funds into Special Purpose Banks subject to banking regulation and supervision.

4. Establishment of a two-tier system which would allow both constant net asset value funds and variable net asset value funds, but with different risk limits: in the case of constant net asset value funds, the limits would only be reserved for small investors or for institutional investors. Consequently, investors could choose between money market funds with a constant net asset value, subject to greater protection, and money market funds with a variable net asset value, which could offer higher yields in exchange for less protection. Furthermore, the idea of separating funds according to their investor type (retail or institutional) is based on the fact that, historically, institutional investors have generated greater risks of runs for money market funds. In particular, these investors have generated greater volatility in money market funds (MMF) and have been much quicker to redeem MMF shares opportunistically. Separating funds by types of investor reduces the likelihood of contagion from institutional money market funds to retail funds. This option, however, may not be operational if most investors are institutional, or if in practice they are using Omnibus accounts in such a way that it is impossible to differentiate between the two types of investor. In addition, the attempt to separate by type of investor could disrupt the function of existing funds as these would have to distribute assets between the fund for individuals and the fund for institutions.

The second option refers to the valuation framework for the assets of money market funds, the aim of which is to increase the level of transparency in valuation. Accordingly, as a general principle, the document specifies assets should be marked to market. Consequently, at any time the net asset value would reflect current losses, reducing the incentive of investors to redeem their shares so as to transfer their losses to other shareholders (as would occur if the assets are not marked to market).

There are, however, some exceptions where the obligation to mark assets to market may not be optimal or feasible. For example, if market prices are not available, valuation models based on the current yield curve and issuer spread may be appropriate. In some cases, valuation at amortized cost may continue to be used under certain conditions, for example, establishing limits to the difference between the amortized cost value and the market value, or allowing its use for instruments with the duration lower than a certain level. However, valuation at amortized cost should be prohibited in cases in which the instruments are sensitive to interest rates and credit risk. Furthermore, all similar instruments should be valued using the same method.

The third option considers issues relating to liquidity management and which are aimed at enabling money market funds to meet redemption requests at any time. These issues include:

1. With regard to portfolio liquidity: requiring money market funds to hold a certain volume of liquid assets and restrict the volume of illiquid assets, and to establish policies and procedures to "know their shareholders" and better anticipate cash outflows.

2. With regard to liquidity risk management through the investor and the fund's obligations: imposing redemption restrictions, for example, by establishing liquidity fees under certain market circumstances or a high volume of redemptions; establishing valuation of assets at the bid price, thus reducing the negative impact of redemptions on the investors remaining in the fund and the incentive to redeem; establishing redemptions in kind, thereby avoiding situations in which other shareholders suffer harm as a result of the need to sell assets when it may not be optimal, but when it is necessary due to the existence of redemptions for a considerable volume; establishment of gates (limits to redemption volumes under certain circumstances).

3. Allowing the use of an external liquidity facility to resolve short-term cash shortages.

The last option refers to issues relating to credit rating agencies. In particular, it advocates reducing the dependency of money market funds on credit rating agencies, driven by the use of ratings in regulation. To this end, the document proposes eliminating the legislative requirements for a certain rating for assets in the portfolio of money market funds. It also suggests encouraging greater differentiation in the ratings granted by agencies to monetary funds: currently, in most cases, agencies grant a triple A rating to these funds.

In addition, it is important to bear in mind that in the case of the rating of portfolio assets, a reduction in the credit rating of one of the assets could lead operators to sell those assets with the consequent negative affect on market prices. If the fall affects the fund, there could be a run of shareholders from said fund, who are used to the triple A rating.

4 Summary and conclusions

The documents put forward for consultation or approved by IOSCO in 2012 relating to CIS basically focus on aspects which have emerged or which take on special importance in the context of the current crisis. Furthermore, it is important to point out that a large part of the recommendations contained in these documents have already been implemented into Spanish legislation.

As mentioned above, some of these documents emphasise the importance of good liquidity management by CIS, as a lack of foresight in this area may trigger effects not only on investors, but also on other markets as the CIS liquidate their positions in the assets in which they have invested. Therefore, the basic issue put forward by IOSCO is the need to design and establish a liquidity management procedure which takes into account the particular features of the CIS, which foresees possible stress situations and which, in general, anticipates said situations.

The lack of liquidity in any scheme may generate the suspension of redemptions of unit-holders, an issue which has occurred with increasing frequency in the current economic circumstances. The IOSCO document sets forth the principles which should be taken into account depending on the stage of the suspension in which the

scheme lies. At any event, the suspension should be the last tool to be used, having previously considered different alternatives such as establishing redemption limits on each redemption date (gates) or application of discounts to redemptions. If there is no alternative, the suspension of redemptions should be carried out in a fair and equal manner for all unit-holders.

In the case of Spain, management companies are required to have in place a comprehensive liquidity management system.[8] CIS should also maintain a minimum ratio of liquid assets defined by legislation. The CIS is also allowed, if necessary, to use borrowing to meet redemptions in periods of temporary cash shortages. Furthermore, Spanish legislation provides for a series of additional mechanisms, such as the requirement of advance notice for redemptions which exceed a certain volume, the possibility of suspending redemptions in certain circumstances, or the possibility of side pockets, or performing partial redemptions.

In the case of money market funds, the significant volume invested over recent years and the fact that they are an important source of funding and liquidity in the business landscape has led to IOSCO reconsidering the valuation of the assets at amortized cost due to the systemic risk which this could trigger. This type of valuation means that the value of the money market fund at times of market turmoil differs from its actual valuation. In this situation, shareholders would try to recover their investment as soon as possible so as to avoid assuming those actual losses. Mass redemptions could lead to a possible suspension of redemptions and the need to sell assets at lower than their valuation price (therefore, leading to a sharp adjustment of the net asset value to the reality of the markets). Faced with the possibility of systemic risk, IOSCO puts forward different options, including changing the valuation from amortized cost to marked to market, and only allowing amortized cost in specific cases. In the case of Spain, it is important to remember that valuation at amortized cost is very limited and only occurs in specific assets,[9] such as cash.

All CIS should carry out correct valuation of the portfolio and, therefore, IOSCO has drawn up a document which sets forth the general principles to be followed. As in the case of liquidity management, CIS should have in place a valuation procedure, including the policy to be taken into account and the methodologies. In this case, IOSCO proposes that a third party (e.g., an auditor or a depository) should review the valuation procedures adopted.

Spanish legislation imposes requirements[10] for CIS management companies to have in place suitable valuation procedures, as well as internal control mechanisms which ensure compliance with the procedures. The obligations of the depository are also assessed in relation to the supervision of the net asset value of the deposited funds. Therefore, in this regard, the IOSCO principles have already been implemented.

---

8 CNMV Circular 6/2009, of 9 December, on internal control of CIS management companies and investment companies (amended by CNMV Circular 6/2010, of 21 December).

9 CNMV Circular 3/2008, of 11 September, on accounting standards, annual accounts and statements of reserved information of management companies of collective investment schemes (amended by CNMV Circular 11/2008, of 30 December, and by CNMV Circular 6/2010, of 21 December).

10 CNMV Circular 6/2009.

Finally, with regard to ETF, the IOSCO recommendations are, above all, aimed at informing about the features of these products so that investors can distinguish them from other CIS or similar products, as well as proposals to prevent the conflicts of interest which may arise in their design and development. To this end, it emphasises the information provided in the offering documents and the need to take measures which prevent conflicts of interest. In the case of Spain, it is important to take into account that legislation only allows ETFs which replicate indices and most of the issues indicated by IOSCO are already included in implementing legislation. Therefore, the prospectus[11] required from all CIS is defined as a document which must contain the information necessary for investors to form a well-founded opinion on the investment proposed to them and its risks, while the periodic public information[12] provides information on the development of the scheme, including, in the case of ETF, information on the index to be followed, comments on its composition, whether the reproduction is carried out with the derivative instruments, the tracking error, the evolution of the benchmark index, an explanation of the investment policy effectively followed over the period to reproduce the index and information on securities lending which may have taken place. With regard to market makers, if there is insufficient liquidity in the secondary market, the management company must look for alternatives to provide that liquidity.

11 CNMV Circular 3/2006, of 26 October, on prospectuses of collective investment schemes. A summarised version of the information is found in the key information document (KID), regulated in European Commission Regulation (EU) 583/2010, which must be given to the investor prior to subscribing units.

12 CNMV Circular 4/2008, of 11 September, on the content of the quarterly, half-yearly and annual reports of collective investment schemes and of the position statement (amended by CNMV Circular 6/2010, of 21 December, and CNMV Circular 4/2011, of 16 November).

Proxy advisors: current situation and legislative recommendations

Group of experts on proxy advisors (*)

(*) This article is a summary of the document dated 16 April 2012 prepared by the Working Group established by the CNMV to assess the activity of proxy advisors as regards Spanish issuers (available at http://cnmv.es/DocPortal/Publicaciones/Grupo/InformeProxyAdvisors.pdf). The aforementioned Working Group comprised Javier García de Enterría (Clifford Chance, S.L.), Pere Kirchner (Cuatrecasas, Gonçalves Pereira, S.L.P.), Rafael Piqueras (Enagás, S.A.), Armando Albarrán (Freshfields Bruckhaus Deringer LLP), Paola Gutiérrez (Georgeson Inc.), Elisa Rincón (Inverco), Fernando Vives (J&A Garrigues, S.L.P.), Rafael García de Diego (Red Eléctrica Corporación, S.A.), Pilar Verde (Santander Asset Management, S.G.I.I.C.), Consuelo Barbé (Telefónica, S.A.) and Rafael Sebastián (Uría Menéndez Abogados, S.L.P.).

1 Introduction

Proxy advisors are companies which provide guidance to investors, mainly institutional investors, on exercising voting rights deriving from ownership of shares in listed companies. Specifically, proxy advisors analyse the information available on a listed company and its general shareholders' meeting and issue voting recommendations to institutional investors on the resolution proposals submitted to voting.

As shown in this article, while the task seems simple, the issues surrounding their activity are complex. This article describes the origin of proxy advisors, the services which they provide and the current situation of the proxy advisor market so as to subsequently address three of the most important issues relating to proxy advisors. The first issue relates to the effective influence of proxy advisors on the voting choice of institutional investors. This issue is one of the starting points necessary for addressing the other two issues: The conflicts of interest of proxy advisors and the problems relating to the technical quality of their recommendations. The last part of the article summarises the different alternatives under consideration for regulating proxy advisors.

2 The origin of proxy advisors

In order to correctly characterise proxy advisors, it is essential to indicate two considerations relating to the context in which the demand for this type of service has developed. Firstly, the concept of institutional investors and the manner in which they carry on their activity, and secondly, the development of their fiduciary duties to their unit-holders as regards exercising voting rights.

I. Institutional investors and their investment portfolio.

In general terms, institutional investors are investors which channel and manage the investment of a large number of persons. For these purposes, institutional investors comprise pension funds, collective investment schemes, insurance companies, credit institutions and securities broker-dealers which regularly and professionally make investments in tradable securities. Depending on their investment policies and objectives, institutional investors aim to maximise the return on their investment, while at the same time attempting to maintain the greatest liquidity possible and to diversify risk. These last two requirements, liquidity and risk diversification, add special features to the way in which they operate. Firstly, in order to maintain the liquidity of their investment, institutional investors invest in listed companies in percentages which are not normally significant. They do this so that any disinvestment will not lead to a loss in the value of the share, which in practice would damage the liquidity of their

shareholding. Furthermore, with the aim of diversifying risk, their portfolio of investee companies is usually extremely varied, both as regards activity sectors and geographic areas. All of the above means that, in most cases, the investment portfolio of institutional investors is made up of a very significant number of listed companies belonging to diverse sectors and geographic areas.

II. Exercising voting rights as part of the fiduciary duties of institutional investors.

Traditionally, due to the characteristics of the investment portfolio of institutional investors (insignificant investment in a large number of companies), the exercising of voting rights which their shareholdings grant them was understood as a complex activity of limited benefit which meant that, in general, institutional investors simply did not vote, or voted systematically in favour of the proposals in accordance with the board of directors or, at most, "voted with their feet": selling their shares and ceasing to be shareholders if they were unhappy with the performance of the company's management.

Over time, the stakes of institutional investors have become increasingly important within the shareholder base of listed companies. Although the shareholding percentage of each of them, considered alone, remains fairly insignificant (for the reasons stated above), the aggregate percentage of institutional investors as a whole increasingly represents a shareholder block with notable, and often decisive, influence.

In the most significant case – the United States – on average 70% of the share capital of the 1,000 US companies with highest stock market capitalisation is held by institutional investors (63.7% of the 50 companies with the highest stock market capitalisation).[1] This situation attracted the attention of regulators, who established that exercising voting rights forms part of the fiduciary duties of institutional investors to their unit-holders and that this should therefore be exercised in a diligent manner, when exercising voting rights is to the benefit and in the interests of the unit-holders. Specifically, the Securities and Exchange Commission (SEC) in 2003 established the obligation for mutual funds to adopt policies and procedures which ensured that they exercise their voting rights in defence of the interests of their shareholders and clients.[2] In this regard, the federal authorities of the United States have construed that pension funds have similar obligations: "The fiduciary act of managing plan assets that are shares of corporate stock includes the voting of proxies appurtenant to those shares of stock".[3] This regulatory framework is currently under review relating to conflicts of interest and technical quality and transparency when issuing voting recommendations.[4]

---

1 See W. Heineman and S. Davis (2011), *Are institutional investors part of the problem or part of the solution? Shareholders' role in US public equity markets*, available at http://www.ced.org/images/files/80235_CED_WEB.pdf.

2 See the rule *Disclosure of Proxy Voting Policies and Proxy Voting Records by Registered Management Investment Companies*, available at http://www.sec.gov/rules/final/33-8188.htm.

3 See the document *Interpretive bulletin relating to written statements of investment policy, including proxy voting policy or guidelines*, available at http://www.access.gpo.gov/nara/cfr/waisidx_02/29cfr2509_02.html.

4 In July 2010, the SEC published a *Concept release on the US proxy system*, which is currently open to comments, relating to several aspects of the US proxy system.

In Europe, the European Commission approved Commission Directive 2010/43/EU, of 1 July 2010, implementing Directive 2009/65/EC of the European Parliament and of the Council as regards organisational requirements, conflicts of interest, conduct of business, risk management and content of the agreement between a depository and a management company. This Directive requires management companies to develop strategies to determine, to the exclusive benefit of the collective investment schemes concerned, when and how voting rights attached to instruments held in the managed portfolios are to be exercised, including the procedures for: (i) monitoring relevant corporate events, (ii) ensuring that the exercise of voting rights is in accordance with the investment objectives and policy of the relevant collective investment schemes, and (iii) preventing or managing any conflicts of interest arising from the exercise of voting rights.

In the United Kingdom, the UK Stewardship Code, published by the Financial Reporting Council (regulatory body in United Kingdom with competence in the area of corporate governance) in July 2010 contains certain principles and guidelines aimed at institutional investors, including the recommendation of disclosing whether they receive the services of a proxy advisor or any other advisor and the manner in which these services are used. It establishes in Principle Six that those institutional investors which sign up to the code must disclose how they exercise their voting rights in the companies in which they invest and the voting policies which they follow ("Institutional investors should have a clear policy on voting and disclosure of voting activity"). This document is understood as a complement to the Corporate Governance Code and is also subject to the "comply or explain" principle. The Financial Reporting Council publishes a list of the organisations which have signed up to the code on its website, which includes proxy advisors.

In France, in accordance with Article L.533-22 of the Monetary and Financial Code, asset management companies must exercise the voting rights corresponding to the shares which they manage in the interest of the beneficial owners and must inform the AMF (Autorité des Marchés Financiers) about the exercise of voting rights, or explain the reasons why they do not exercise those rights. Within the context of the above, the AMF has drawn up a non-binding recommendation (*Recommandation AMF n° 2011-06 sur les agences de conseil en vote*) aimed specifically at proxy advisors, pursuant to which:

1. the voting guidelines of proxy advisors should be transparent and published on their website,

2. the reports issued by proxy advisors should include the reasons why the recommendation is positive or negative,

3. the draft report should be given to the issuer for review and comments or should expressly reflect that this has not been done, explaining the reasons, and the comments of the issuer should be included in the definitive draft, and

4. proxy advisors should have a code of ethics which includes reasonable and appropriate measures for preventing conflicts of interest. The report should also include potential conflicts of interest which they may have with issuers and the measures applied in order to manage them.

The Code for External Governance, published by the European Fund and Asset Management Association (EFAMA) in April 2011 establishes the recommendation that institutional investors should disclose how they exercise voting rights belonging to shares which they manage and whether they use the services of a proxy advisor. This code is only applicable to management companies which sign up to it.

In Spanish law, the legislation on collective investment schemes and pension funds establishes that (i) the exercise of voting rights is only mandatory in certain cases depending on the quantitative and stable importance of the shareholding and that (ii) when they are exercised, they should be exercised to the exclusive benefit of unit-holders. Similarly, in both cases and irrespective of the importance of the shareholding, they are obliged to have an express policy for exercising voting rights and to disclose this policy in the public information sent to final investors. No reference is made to the use of proxy advisors.

The complexity of institutional investors' portfolios of investee companies (multiple entities, subject to different jurisdictions), together with the fact that most general shareholders' meetings of all listed companies (irrespective of the jurisdiction where they operate) are concentrated in a specific period of the year means that institutional investors need to use a significant amount of resources in order to comply with the duty of exercising voting rights in an appropriate manner. The aim of reducing these resources has led to a rise in the demand for the services provided by proxy advisors.

The fact that the number of institutional investors with a stake in a particular company is usually high and the fact that their advisory needs are similar, explains the fact that outsourcing at least part of the advisory work to proxy advisors may lead to significant cost savings.

As we shall see later, this complexity which leads institutional investors to use proxy advisors, especially the fact that general meetings are highly concentrated over a short time span, partly explains one of the issues which we will address below: the technical quality of the recommendations.

3 Services provided by proxy advisors

The services provided by proxy advisors[5] to institutional investors can be divided into two major groups. The first group includes services linked to providing advice in relation to the exercise of voting rights by institutional investors. The main services belonging to this category include the preparation of reports aimed at institutional investors which facilitate the exercise of the vote in the general shareholders' meetings of the companies in which they have invested; the issuance of general

5 The services described in this section reflect these services announced on the websites of the main proxy advisors (ISS, Glass Lewis and Egan-Jones Proxy Services).

voting recommendations for the resolution proposals in each general shareholders' meeting in accordance with the guidelines designed by the proxy advisor itself or the guidelines of the specific institutional investor; analysis of the remuneration of executive directors and senior management and issuance of the subsequent reports or voting recommendations; and, finally, the design of specific voting guidelines for institutional investors. The second group covers those auxiliary services which have been developed around the services in the first group, which are predominantly technical, such as development of software which checks that all the corresponding voting rights have been assigned to this institutional investor in accordance with the number of shares it holds, that its voting instructions are issued correctly, that they are in line with its voting policies, etc.

In addition to the services which make up the core of the proxy advisor's work, there are other services provided by the business group to which, as the case may be, the proxy advisor belongs and which are especially important in the cases in which the recipients of said services are not the institutional advisors. Accordingly, for example, the group which one important proxy advisor belongs to markets investment decision support tools while another of the companies provides advice to issuers on corporate governance. Another one of the most important proxy advisors is a company controlled by a large institutional investor. Finally, another important proxy advisor belongs to a credit rating agency.

4 The proxy advisor market: main operators

The proxy advisor market is highly concentrated in the United States.[6] According to available sources,[7] two operators, Institutional Shareholder Services ("ISS") and Glass, Lewis & Co ("Glass Lewis"), take up the bulk of the market, with the former having a market share of 61% and the latter a market share of 37%. Far behind them are Egan-Jones Proxy Services and Marco Consulting Group, with a joint market share of around 3% in the United States.

There is no reliable data available on the market share of European proxy advisor firms, although all the sources consulted suggest that the large majority of the most important US institutional investors are advised by ISS or by Glass Lewis. The most important firms in Europe are PIRC, Manifest and IVIS (in the United Kingdom), Proxinvest (in France) and Internet Voting Execution (IVOX) in Germany.

There are basically three reasons which might explain the high concentration in the sector:

a. Firstly, due to the characteristics of the service, the more reports or recommendations on a single issuer that are carried out by a single proxy advisor, the

6 See the OECD report on *Corporate Governance and the financial crisis: Conclusions and emerging good practices to enhance implementation of the Principles*, paragraph 86. Available at http://www.oecd.org/dataoecd/53/62/44679170.pdf.

7 See T. Belinfanti, *The proxy advisory and corporate governance industry: The case for increased oversight and control*, available at http://ssrn.com/abstract=1557744.

lower the costs for performing said work (to the extent that the analyses, without being identical, are very similar), leading to lower prices.

b. Secondly, and relating to the above point, an institutional investor will prefer that all the reports are issued by one single proxy advisor or a low number of proxy advisors due to the cost for the institutional investor of ensuring that the guidelines of the proxy advisor used are in line with its own needs.

c. The third reason is that the institutional investor may sometimes aim to obtain a certain liability (reputational) insurance by contracting the advice of certain proxy advisors. This naturally leads to oligopolies, as is the case, for example, of credit rating agencies.

The only factor which works in the opposite direction i.e. in favour of greater business dispersal, is the fact that institutional investors usually contract more than one proxy advisor so as to compare their analyses or to increase the aforementioned insurance effect.

5 Influence of the recommendations

Measuring the influence of the voting recommendations made by proxy advisors on the decisions adopted by institutional investors is extremely complex. Firstly, this is because determining the level of causality in the influence is not simple as it cannot be ruled out that the opinion of the institutional investor also conditions the opinion of the proxy advisor. Furthermore, it is difficult to determine in practice to what extent the institutional investor would have issued the same vote if the recommendation had been different and to what extent the institutional investor trusts the recommendation issued by a proxy advisor. Accordingly, on occasions it has been indicated that what institutional investors aim for when contracting one or several proxy advisors is to know the information supporting the proposed recommendation so as to be able to adopt an in-house decision. The fact that the institutional investor, based on the explanatory information in the recommendation gathered by a proxy advisor, reaches the same conclusion will be one of the cases in which the influence of the proxy advisor should be considered as relative.

In attempting to offer a quantitative estimate of the influence of the vote in US companies, some authors estimate that the recommendations of the two main proxy advisors may have an impact of between 6% and 10% of the voting rights of institutional investors (understood as the number of institutional investors which do not carry out any type of in-house analysis and automatically issue their vote in line with the recommendation).[8]

For their part, Spanish institutional investors do not normally use the services of proxy advisors to define their voting. In this regard, according to data from a survey

8 See S. Choi, J.E. Fisch and M. Kahan, *The Power of Proxy Advisors: Myth or Reality?*, article published by the University of Pennsylvania Law School, available at http://www.law.upenn.edu/cf/faculty/jfisch/.

carried out in 2011 of 13 Spanish institutional investors and entities which managed around four billion euros in equity instruments in Spain, 62% declared that they did not take into account the voting recommendations of proxy advisors at all, while 15% use their recommendations exclusively for the general shareholders' meetings of listed companies not domiciled in Spain.[9]

A recent study which analysed the behaviour of 60 foreign institutional investors present in a large number of listed companies making up the Ibex 35 in the 2009, 2010 and 2011 general shareholders' meeting seasons revealed the following data:[10]

i The top firm is followed by 55 institutional investors of the 60 analysed, while the second most followed proxy advisor is followed by 10 institutional investors, and the third by nine.

ii. With regard to the analysed investors which follow the top proxy advisor, the study analysed the level of effective impact which their recommendations have on voting decisions. For 30.9% of the investors which followed said proxy advisor, their decisions on voting outcomes depend to a large extent on the recommendations made by the proxy advisor. For the remaining 69%, the recommendations are taken as a reference for internal analysis, without being determining factors.

iii. Of the 17 investors which have a high level of dependence on the top proxy advisor, only three of them deviated from their recommendations in Spain between 2009 and 2011. Furthermore, of the 38 investors which used said proxy advisor as a reference, 28 deviated at some time from their recommendations over the same period.

Given that the main users of the services provided by proxy advisors are institutional investors, the influence of the voting recommendations depends to a great extent on the level of involvement of institutional investors among the shareholders of Spanish issuers. In this regard, it is important to bear in mind that the Spanish stock market is a highly concentrated market. According to data published by the CNMV in the corporate governance reports of entities with securities admitted to trading on official secondary markets and in the Ibex 35, a natural or legal person holds a majority of the voting rights or exercises or could exercise control in 28.1% of listed companies in 2010 (31.4% in the Ibex 35). In 2010, the sum of significant shareholdings[11] and the share packages in the hands of the board exceeded 50% of

9 "El reto del Buen Gobierno. Examen de la política de voto de las instituciones de inversión colectiva en las sociedades en las que invierten" [The Challenge of Good Governance. Examination of the voting policy of collective investment schemes in the companies in which they invest]. Exclusive survey conducted by Georgeson, Cuatrecasas Gonçalves Pereira and the Funds People magazine. Entities surveyed: Ahorro Corporación Gestión, Aviva Gestión, BBVA AM, Cajastur Gestión, CatalunyaCaixa Inversió, EDM Gestión, Gesconsult, IberCajaGestión, March Gestión, Popular Gestión, Renta 4 and Santander AM. September 2011 issue.

10 See *El Gobierno Corporativo y los Inversores Institucionales* [Corporate Governance and Institutional Investors]. Georgeson – Cuatrecasas, Gonçalves Pereira, ed. 2012. The main sources of information were: voting records of institutional investors available for the 2009, 2010 and 2011 general meetings seasons; internal sources of information of Georgeson; and the ISS Institutional Voting Tracking platform.

11 We assume that an institutional investor which holds a significant interest will not use the services of a proxy advisor, or that, if it does do so, it will carry out an internal analysis process on how to vote which will be much more thorough than if the shareholding is not significant.

the capital in 76.5% of companies (75% in 2009). This was the case in 11 of the 35 companies in the Ibex 35.

In this context, the influence of proxy advisors on Spanish issuers may be qualified, in some cases, by the lower level of importance of the votes of institutional investors on their decisions. According to the research service of Bolsas y Mercados Españoles,[12] which quotes data provided by FactSet corresponding to the second quarter of 2011, the value of the shareholdings of institutional investors (mutual funds, pension funds and investment trust companies) in Ibex 35 companies amounted to 120,382 million dollars. Considering a total capitalisation of Ibex 35 companies of around 320 billion euros (at the start of 2012),[13] the percentage of capital in the hands of institutional investors accounts for around one third of the total.[14] This figure is a long way from the percentage for institutional investors in listed companies in the United States, where, as indicated above, a very significant majority of the share capital of the main large companies is in the hands of institutional investors.

Notwithstanding the above, it is undeniable that the influence of proxy advisors on the decisions adopted by general meetings in Spanish listed companies has grown in recent years. Specifically, that influence is more important in companies with a high free float and is especially significant in Spanish companies which, as a consequence of the special legislation regulating their activities, have special limits to holdings in their share capital or for shareholders exercising voting rights, as is the case of the operators of electricity and gas transmission grids. In these companies, the recommendations of proxy advisors may become decisive factors in the approval or rejection of proposals by the board of directors.

This has led to growing concern among Spanish issuers about the recommendations of proxy advisors. Therefore, it has become common for the administrative offices of the board of directors and investor relations units of many Spanish issuers to visit the main proxy advisors or maintain contact with them before holding each general meeting so as to explain the proposals submitted to the consideration of the general meeting. This practice is also extending to the direct relationship with the persons responsible for voting in significant institutional investors.

6 Conflicts of interest

As indicated above, the duty of institutional investors to exercise the voting rights inherent to their shares forms part of the fiduciary duty that they owe to their

12 The data has been taken from the article "Las compañías del IBEX-35 presentes en 10.000 fondos mundiales" [Ibex 35 companies present in 10,000 global funds], signed by the research service of Bolsas y Mercados Españoles, in the third quarter 2011 issue of *Revista de Bolsas y Mercados Españoles*.

13 Published on 14 January 2012 in *Expansión*, "El Ibex gana un 215% en 20 años" [The Ibex gains 215% in 20 years].

14 Notwithstanding the above, according to some sources (*Revista Capital*, March 2011, "Grandes Inversores Institucionales", [Major Institutional Investors] which in turn cites Bolsas y Mercados Españoles), the purchases and sales of shares involving institutional investors accounted for over 75% of the total in 2010.

unit-holders. In this regard, when institutional investors hire the services of proxy advisors, their objective is that the advisors recommend how they should vote ultimately to meet the interests of their unit-holders.[15]

When this interest is not aligned with the interest of the proxy advisor, there is a conflict of interest and the risk arises that the recommendation may not be in accordance with the interests of the institutional investor and, therefore, of its unit-holders (i.e. that the interests of the proxy advisor prevail).

Accordingly, the independence and impartiality of the criteria used by proxy advisors may be threatened by:

a. The provision of other services to the issuers or other shareholders of the issuer. Occasionally, proxy advisors provide advice to corporate issuers, indicating, for example, what aspects they should improve in their corporate governance system so as to receive a favourable opinion from proxy advisors (including from the proxy advisor which provides the service). In these cases, the entity which has provided this type of service may be interested in the voting recommendations which are later issued being favourable so that they corroborate the validity of the advice provided to the issuer. Therefore, when issuing voting recommendations in relation to the entities to which it has provided advisory services on corporate governance, the proxy advisor may incur in a potential conflict of interest. In the particular case of the proxy advisor indicated above as provider of advisory services to issuers, firm attempts are made to prevent a conflict of interest by publishing detailed information on its website about the existence of a potential conflict and the mechanisms designed to prevent it, including firewalls which include the legal, physical and technological separation of the proxy advisor division and the division providing advisory services on corporate governance.

b. Belonging to a business group in which the objectives of the parent company may be incompatible with the independence and objectivity of the criteria of the proxy advisors. For example, the controlling shareholder of one of the main proxy advisors is an institutional investor and that of another is a credit rating agency. The conflict of interest in this case comes from the controlling shareholder relationship between the proxy advisor and its shareholder or control group which, in turn, may have different priorities or incentives.

c. Ownership of a personal interest in the listed company, for example if the proxy advisor and related parties hold shares in the company subject to analysis.

d. Finally, conflicts of interest may arise when advising on votes in relation to companies which, in turn, have a direct or indirect shareholding in another listed company.

---

15 It must be remembered that the risk inherent to exercising voting rights corresponds to the unit-holders of the institutional investors given that they suffer the effects, although the liability corresponds to the management company of the institutional investor given that it is responsible for deciding how to exercise the rights pursuant to the interest of the unit-holders. This conflict of interest leads to the danger of de-coupling between the risk and liability, which are held by the unit-holders and the institutional investor, and the decision-making power which may be assumed *de facto* by the proxy advisor.

These considerations may lead to questions about the independence of proxy advisors with regard to issuers, their clients or other shareholders.

7 Technical quality of the recommendations

Together with the existence of conflicts of interest, another of the concerns which have arisen in relation to the work of proxy advisors relates to the possible material errors which they commit when issuing their voting recommendations. The problem lies in the possibility that the recommendations do not meet the interests of the institutional investors or of their unit-holders, although in this case the cause may be a simple error.

Accumulated experience has made it possible to identify the main reasons which have a negative impact on the technical quality of recommendations and which lead to said errors. The first of these reasons is the absence of regular contact between proxy advisors and issuers. In general, proxy advisors do not have scheduled regular contact with issuers, although contact does occasionally take place. Contacts between proxy advisors and issuers allow, for example, an issuer to report material errors in the recommendations issued by the proxy advisor or to prevent a negative recommendation bringing certain future commitments. The absence of standardised criteria governing said relations complicates interaction between proxy advisors and issuers. Proxy advisors which do not carry out any type of contact with issuers prior to formulating their recommendations argue that this strengthens the independence of their work and mitigates the risk that issuers attempt to put pressure on the proxy advisor to modify its recommendations.

Secondly, the main proxy advisors usually base their voting guidelines on the corporate governance principles of their home countries (generally, the principles of the US/British corporate governance model). These principles respond to a set of problems and needs that are characteristic of a corporate market which is much less concentrated than the Spanish market. Accordingly, for example, we can highlight the guidelines of one of the main proxy advisors relating to the number of independent directors (at least half) and regarding the separation of the offices of chairperson of the board of directors and the chief executive officer. Both recommendations are standard in the United States[16] and in the United Kingdom,[17] which are much less concentrated markets, in which the potential conflicts normally correspond to the position of the directors and the shareholders as a whole. In markets with a much more concentrated shareholders base, such as the Spanish market, it may not make sense to apply the same patterns.

16 The *Key agreed principles to strengthen corporate governance for US publicly traded companies*, published by the National Association of Corporate Directors in 2008, establishes that half of the members of the board of directors should be independent and that the office of the chair of the board should not be held by the chief executive officer (obliging companies to give an explanation when this is not the case).

17 The *UK Corporate Governance Code*, published by the British regulator – the Financial Reporting Council – also establishes that the positions of the chair of the board and chief executive should be held by different persons and that, except for smaller companies, at least half of the directors should be independent.

One aspect of concern for Spanish issuers is the difference in good corporate governance criteria used by international proxy advisors in preparing their reports and voting recommendations and those which are in force in Spain (contained in the Unified Good Governance Code) and in the European Union. In general, the criteria followed by one of the main proxy advisors (which publishes its voting guidelines) are more restrictive than those of the corporate governance legislation and recommendations applicable in Spain. For example,[18] while the Capital Companies Act allows six-year terms for directors, this proxy advisor recommends voting against appointments or re-elections for periods greater than four years.

In addition, issuers sometimes refer to the lack of publication of voting guidelines. The recommendations are generally not made public, and neither are the guidelines on which they are based often made public. Although it is easy to understand why the content of the recommendations is not published (most of the operators only publish a limited number of recommendation reports to gain publicity) given that the revenue source of proxy advisors mainly comes from the sale of the information contained in said reports to institutional investors. It is however more difficult to understand the failure to publish the guidelines. The failure to publish the guidelines according to which the recommendations are issued prevents issuers from analysing or reviewing them and, therefore, detecting whether the recommendation is in line with the proxy advisor's guidelines or whether it contains a material error. In Europe, following the recommendations established by the French regulator, AMF, in March 2011,[19] which establishes that proxy advisors must publish the guidelines on which their voting recommendations are based, the advisory firm Proxinvest publishes its voting guidelines. However, these guidelines are not very specific.

Finally, as indicated above, most general shareholders' meetings of listed companies are concentrated in a specific period of the year. Furthermore, especially in Europe, the regulatory framework affecting certain companies is extremely diverse. This makes it difficult for proxy advisors to organise their staff as they must use a high number of staff over a very short period of time. In this regard, US/British thinking and some issuers agree that one of the problems which harm the technical quality of the recommendations is that the analysts which prepare the recommendations lack the necessary technical qualifications and experience.

8 Regulation alternatives

Faced with the possible conflicts of interest and the areas for improvement in the provision of services by proxy advisors, some specialists have identified various options for regulating proxy advisors, as shown below.

The first option would be not to take any measure with regard to proxy advisors, whether national or European, binding or non-binding. This option could be justi-

18 Taken from the document 2012 *European proxy voting summary guidelines*, published by ISS on 19 December 2011, and available at http://www.issgovernance.com/policy/2012/policy_information.

19 Recommendation number 2011-06 of 18 March 2011, on proxy advisors.

fied by the fact that the provision of proxy advisor services is a relatively recent and embryonic phenomenon in Europe and, therefore, any limits to this activity by establishing codes of conduct or mandatory rules could turn out to be not only unnecessary, but also disruptive for a market currently under formation, creating barriers to entry for new proxy advisors and limiting competition in a market which is already highly concentrated. Another argument which would support this option is a lack of conclusive evidence on the level of influence of the voting recommendations of proxy advisors.[20]

This is the alternative which has been followed to date both by EU law and at a domestic level by most Member States of the European Union, including Spain. As a counterpoint to this regulatory inaction, it is sometimes argued that both in Spain and in Europe the use of proxy advisor services is spreading and, with regard to this, there are currently no appropriate mechanisms for controlling the conflicts of interest to which they are subject and the technical quality of their work. Furthermore, it would seem to be desirable to have at least minimum convergence towards the model implemented in the United States, as well as towards the initiatives which some European countries have begun to develop.

The second regulatory option consists of EU-wide approval of a voluntary code of conduct for proxy advisors which promotes the development of their activity in market conditions and contributes towards solving the possible problems associated with their work. The effectiveness of self-regulation proposals such as the code of conduct would lie in the reputational risk for those who fail to comply with the code. Bearing in mind that many proxy advisors use their own internal guidelines for carrying on their activity, it could be questioned whether promoting a sectoral alternative would be welcomed by proxy advisors. At any event, even if the code was welcomed by proxy advisors, there is a risk that the dominant proxy advisor (which, as we have seen, is much larger than its competitors) would impose its own rules on the other participants, incorporating into the code of conduct, almost unilaterally, rules which cannot be assumed or which are inappropriate for smaller companies. At the same time, the attempt to obtain consensus between all the parties involved could mean that the standards required are lowered for all proxy advisors so as to adapt to the characteristics and needs of firms with fewer technical and material resources. Therefore, it seems reasonable to think that binding rules are required or at least rules which have a certain mandatory nature to comply with the objectives.

The third regulatory option would be for the European Union to adopt measures aimed at regulating and supervising the activity of proxy advisors through a code of non-binding recommendations (soft law). The content of this code could vary depending on how voluntary it is (for example, a set of voluntary guidelines prepared by ESMA, or a European code of good practices governed by the "comply or explain"

20 See Choi, Fisch and Kahan, op. cit.; M.C. Schouten, Do Institutional Investors Follow Proxy Advice Blindly?, available at http://ssrn.com/abstract=1978343; or the guide by Georgeson and Cuatrecasas *Lo que las sociedades cotizadas deben saber para las temporadas de juntas generales de accionistas de 2011-2012: el gobierno corporativo y los inversores institucionales* [What listed companies should know for general shareholders' meetings seasons 2011-2012: corporate governance and institutional investors] (2012 edition), available at http://www.georgeson.it/images/Seminars/Booklet.pdf.

principle) and to whom it is addressed (to proxy advisors or to institutional investors, thus having an indirect impact on the activity of the former).

The final regulatory option would be to directly regulate the activity of proxy advisors in Europe by establishing a registration and supervision system, as well as legislative mechanisms which foster appropriate management of conflicts of interest, an increase in the transparency of their activities and the methodologies and criteria which they apply and enhanced quality of the voting recommendations, emphasising the need to have qualified staff and appropriate procedures. This option could be disproportionate at the current time, given that there is no conclusive evidence on the level of influence of proxy advisors or on the negative effects in practice of the problems which tend to be associated with their activity, which in turn seems incompatible with the adoption of immediate legislative measures.

Following the same line, the establishment of mandatory rules for proxy advisors would not be in line with the recent initiatives taken by other European countries, such as the United Kingdom and France, which are non-binding, or with the European corporate governance framework, which is applied on a national basis using the "comply or explain" principle, and this would mean imposing stricter measures on proxy advisors than on issuers and institutional investors. Finally, the introduction of legislative measures could have a negative impact on the level of growth and competition in the European proxy advisor market, introducing greater barriers to entry than those which currently exist.

9 Conclusions

The conclusion of the Group of Experts set up by the CNMV was that the most reasonable regulatory option would be a European code drawn up by ESMA aimed directly at proxy advisors and subject to the "comply or explain" principle. This code, similar to *Recommandation AMF n° 2011-06* for proxy advisors in France, should establish a harmonised EU framework for this activity with the aim of subjecting it to certain general standards and principles which ensure that proxy advisors carry on their advisory function in defence of the best interests of their clients, all within a framework of flexibility.

With regard to the firms subject to said code, the Group of Experts ruled out the inclusion of recommendations aimed at institutional investors, as users of proxy advisor services, as it believed that the regulatory framework of institutional investors already clearly includes strict obligations with regard to exercising voting rights. The effectiveness of the code would be linked to the reputational risk to which proxy advisors would be subject if they do not comply with recommendations established by ESMA and do not provide any explanation in this regard, which could lead to users of advisory services changing to firms which do comply with the code.

The main advantage of this alternative is that, at the same time as it offers a harmonised EU framework, it provides the industry with certain flexibility compared with the alternative of direct regulation. In this regard, the fact that the code is governed by the "comply or explain" principle would provide proxy advisors with a margin to

adapt it to their internal rules and local corporate governance standards, as the entities without the possibility of complying with the applicable recommendations could deviate from them, if necessary, depending on the specific nature of their business or the different market practices and standards in different jurisdictions, explaining said deviations. Furthermore, adopting a European code of this type is the option which would be most in line with current corporate governance regulation in Europe, which in general is included in national codes with voluntary, non-binding recommendations.

The self-regulation code would contain the measures necessary to solve or attempt to mitigate the two fundamental issues indicated above in this article relating to the activity of proxy advisors: conflicts of interest and the technical quality of the recommendations. With regard to the first issue, the code should contain a series of reporting obligations, including those relating to the main sources of revenue of proxy advisors, their ownership structure, the general voting guidelines and how they manage conflicts of interest.

Furthermore, the code should contain a series of measures aimed at optimising the technical quality of voting recommendations, with the aim of avoiding operating errors, and it should establish professional qualifications and technical requirements for the professionals working for proxy advisors, and the requirement to provide the issuer with the draft recommendations prior to publication, so that it may correct errors or clarify or specify aspects about which there may be a dispute.

With the aim of facilitating the market's assessment of the activity of proxy advisors, the code should require that the entity signing up to, or subject to, the code, as the case may be, issue annual reports explaining the level of compliance with its recommendations.

Finally, it would be necessary to provide maximum publicity and dissemination of the code so as to encourage proxy advisors to sign up to the code as these are mostly companies which are not established in the European Union and which are therefore not subject to supervision by ESMA. This would also promote awareness among issuers and investors as a whole and, therefore, the effectiveness of the code in practice.

IV Legislative Annex

New legislation approved since publication of the CNMV bulletin for the first quarter of 2012, in chronological order, is as follows:

– Royal Decree-Law 6/2012, of 9 March, on urgent measures to protect mortgagors with limited resources.

  This Royal Degree-Law establishes a series of measures relating to mortgage debtors who fall below the so-called "poverty threshold". Accordingly, the beneficiaries of the measures established will be persons with insufficient income and assets to service mortgage obligations and basic subsistence needs.

  The measures established mainly consist of various mechanisms aimed at allowing the mortgage debt to be restructured based on the extraordinary difficulties which debtors face in meeting the payment, as well as establishing flexibility for executing the mortgage guarantee.

  The protection model revolves around the preparation of a Code of Good Practice to which credit institutions and other institutions which professionally provide loans or mortgages may choose to adhere. Compliance with the Code will be overseen by a control committee made up of representatives of the Ministry of Economy and Competition, the Bank of Spain, the CNNV and the Spanish Mortgage Association.

  The Code of Good Practice includes three stages of action:

  – Viable restructuring of the mortgage debt.

  – Write-down of the total debt, which the lender has the right to accept or reject, as a supplement to the previous stage.

  – Dation in payment as a method for discharging the debt, which is optional for the debtor and mandatory for the banks, if neither of the previous two stages has reduced the debtor's mortgage effort to an affordable level.

  Similarly, the rates of interest for late payment applicable to mortgage loan agreements are moderated so as to reduce the financial charge generated in the event of a default of the protected debtors.

  These measures are supplemented by other procedural and tax amendments aimed at simplifying extrajudicial enforcement and establishing tax exemptions for the public deeds formalising the contractual novations executed under the Code of Good Practice.

– Royal Decree-Law 9/2012, of 16 March, on simplification of reporting requirements and documentation of mergers and splits of capital companies.

  This Royal Degree-Law incorporates several EU Directives into Spanish law and amends the consolidated text of the Capital Companies Act, approved by Royal Legislative Decree 1/2010, of 2 July, and Law 3/2009, of 3 April, on structural modifications of commercial companies.

In certain cases of mergers and splits, the number and content of the documents which must be provided to shareholders is simplified and these corporate operations are speeded up by channelling the publicity prior to the merger agreement through the websites of the capital companies as an alternative to filing the merger and split projects in the Companies Registry.

The legal regime for the website of listed companies is completed, regulating their creation, modification, transfer and suppression and the duties of directors as regards the contents of the website, and disciplinary measures are established for issues relating to interruption of access. Similarly, an express provision is made for the possibility of carrying out electronic communications between the company and shareholders, including the sending of documents and information when the shareholder has expressly accepted this form of communication.

Another of the amendments carried out to the Consolidated Text of the Capital Companies Act consists of adding new exceptions to the requirement of a report by an independent expert for valuing non-monetary contributions in a public limited company.

Finally, with regard to creditors' rights of objection, this Royal Decree-Law 9/2012 establishes that if the merger has been carried out notwithstanding the exercise of the right to objection in the correct time and manner, without the provision of a guarantee by the company, the creditor may request that the Companies Registry include a note in the margin of the entry carried out which records the exercise of that right. Within the following six months, the creditor may file a suit with the Commercial Court against the acquiring company or against the new company requesting the provision of the guarantee for payment of the amount owed.

Similarly, it modifies the rules relating to the rights of withdrawal of shareholders in the event of a cross-border merger and of the transfer of the registered business address abroad.

– Royal Degree-Law 10/2012, of 23 March, which amends certain financial rules relating to the powers of the European Supervisory Authorities.

The measures provided in this Royal Decree-Law, which transposes an EU Directive and introduces modifications in several laws, including the Securities Market Act, aim to adapt the national scheme for supervising obligations deriving from European Union Law, which establish a new European supervisory framework equipped with those instruments considered essential for avoiding a repeat of the financial practices which led to the economic crisis.

With this aim of strengthening and unifying the legal framework for supervision, it establishes obligations for cooperation and collaboration between the European Supervisory Authorities (the European Banking Authority, the European Securities and Markets Authority and the European Insurance and Occupational Pensions Authority) and their counterparts in each country (in the case of Spain, the Bank of Spain, the CNMV and the Directorate-General of Insurance and Pension Funds).

It establishes the requirement to communicate and notify, within their scope of authority, certain information and actions to these European supervisory authorities. This Royal Decree-Law introduces the obligation of cooperation between the Bank of Spain, the CNMV and the Directorate-General of Insurance and Pension Funds to share confidential information. It also establishes mechanisms for communication, *inter alia*, of certain penalties imposed on supervised entities, as well as communication of the signing of collaboration agreements between supervisory authorities.

Furthermore, it introduces reporting procedures in the event of financial emergencies in the member countries and introduces the possibility of binding mediation by the European Supervisory Authorities in joint decision-making between supervisors of Member States.

– Royal Decree-Law 17/2012, of 4 May, on urgent environmental measures.

Article 4 of this Royal Decree-Law amends the Securities Market Act 24/1988, of 28 July, as a consequence of Commission Regulation (EU) No. 1210/2011, of 23 November 2011, amending the Regulation on auctions, in particular to determine the volume of greenhouse gas emission allowances to be auctioned prior to 2013.

This amendment of the Securities Market Act, which consists of adding the Twenty-First Additional Provision, is in response to the need for Member States to ensure that national measures which transpose legislation on insider dealing and market manipulation are applicable to the persons responsible for failing to comply with the regime relating to market abuse applicable to auctioned products other than financial instruments, in relation to the auctions carried out inside or outside their territory. To this end, the Royal Decree-Law allows financial institutions to participate in the auctions on their own account or on behalf of clients. It provides the CNMV with powers of supervision, inspection and penalties for conduct relating to market abuse and establishes the breaches to this conduct. Furthermore, it introduces requirements for the CNMV to cooperate with other competent authorities. With this amendment, Spanish financial legislation is now adapted to the imminent start of allowance auctions.

– Royal Decree-Law 18/2012, of 11 May, on the restructuring and sale of the real estate assets of the financial sector.

This Royal Decree-Law aims to dissipate the uncertainty which has been hindering the normalisation of the Spanish financial sector and the recovery of its function of channelling savings to the real economy. Following the same line set by Royal Decree-Law 2/2012, of 3 February (which incorporated measures for strengthening provisions and capital), this Royal Decree-Law establishes additional coverage requirements for the impairment of loans linked to real estate activity classified as in a normal situation.

Furthermore, it establishes provisions to ensure compliance with the new requirements in line with the deadlines established in Royal Decree-Law 2/2012,

of 3 February, for which credit institutions must file a plan detailing the measures which they intend to adopt to ensure said compliance with the Bank of Spain. It also establishes an extended deadline for compliance with the new requirements for provisions for those entities which are going to undertake integration processes, which will have an additional period of 12 months.

In addition, it provides for the establishment of companies to which the credit institutions must provide all the foreclosed real estate or real estate received as payment of debts relating to land for real estate development and real estate construction or developments.

Finally, it provides for exceptional treatment of preferred shares and other similar instruments so that entities with losses or solvency difficulties may defer payment of the expected remuneration and make the payment when their asset position improves.

V Statistics Annex

1 Markets

1.1 Equity

Share issues and public offerings[1]

TABLE 1.1

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[2]
CASH VALUE[3] (million euros)								
Total	11,390.7	16,012.7	17,317.5	4,797.6	6,336.5	2,946.5	3,374.4	2,295.4
Capital increases	11,388.7	15,407.0	17,221.5	4,797.6	6,336.5	2,850.5	3,374.4	2,295.4
Of which, public rights offerings	17.3	958.7	6,441.3	3,696.4	8.4	2,736.6	880.7	0.0
With Spanish tranche	14.9	61.6	6,031.7	3,338.8	8.4	2,684.6	880.7	0.0
With international tranche	2.5	897.2	409.6	357.5	0.0	52.0	0.0	0.0
Secondary offerings	1.9	605.7	96.0	0.0	0.0	96.0	0.0	0.0
With Spanish tranche	1.9	79.1	94.8	0.0	0.0	94.8	0.0	0.0
With international tranche	0.0	526.7	1.2	0.0	0.0	1.2	0.0	0.0
NOMINAL VALUE[3] (million euros)								
Total	1,892.1	6,313.4	5,727.1	1,975.9	2,749.5	453.9	976.6	1,285.8
Capital increases	1,892.0	6,304.4	5,721.1	1,975.9	2,749.5	447.9	976.6	1,285.8
Of which, primary offerings	0.1	1.9	2,092.9	1,871.3	0.5	221.0	523.1	0.0
With Spanish tranche	0.1	1.8	1,910.6	1,693.4	0.5	216.7	523.1	0.0
With international tranche	0.0	0.1	182.3	177.9	0.0	4.4	0.0	0.0
Secondary offerings	0.0	9.0	6.0	0.0	0.0	6.0	0.0	0.0
With Spanish tranche	0.0	8.9	5.9	0.0	0.0	5.9	0.0	0.0
With international tranche	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
NUMBER OF FILES[4]								
Total	53	69	92	23	26	26	24	13
Capital increases	53	67	91	22	26	26	24	13
Of which, primary offerings	2	12	8	3	3	2	5	0
Of which, bonus issues	11	15	22	5	8	7	2	3
Secondary offerings	1	3	2	1	0	1	0	0
NUMBER OF ISSUERS[4]								
Total	34	46	45	16	22	15	14	9
Capital increases	34	45	45	15	22	15	14	9
Of which, primary offerings	2	12	8	3	3	2	5	0
Secondary offerings	1	2	1	1	0	1	0	0

1 Includes registered offerings with issuance prospectuses and listings admitted to trading without register issuance prospectuses.
2 Available data: May 2012.
3 Does not include registered amounts that were not carried out.
4 Includes all registered offerings, including the issues that were not carried out.

Primary and secondary offerings. By type of subscriber

TABLE 1.2

Million euros	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[2]
PRIMARY OFFERINGS								
Total	17.3	958.7	6,441.3	3,696.4	8.4	2,736.6	880.7	0.0
Spanish tranche	14.9	61.6	3,335.8	3,327.4	8.4	0.0	14.5	0.0
Private subscribers	0.0	2.5	2,017.7	2,015.4	2.3	0.0	4.1	0.0
Institutional subscribers	14.9	59.0	1,318.1	1,312.1	6.0	0.0	10.4	0.0
International tranche	2.5	897.2	357.5	357.5	0.0	0.0	0.0	0.0
Employees	0.0	0.0	11.4	11.4	0.0	0.0	0.0	0.0
Others	0.0	0.0	2,736.6	0.0	0.0	2,736.6	866.3	0.0
SECONDARY OFFERINGS								
Total	1.9	605.7	96.0	0.0	0.0	96.0	0.0	0.0
Spanish tranche	1.5	79.1	0.0	0.0	0.0	0.0	0.0	0.0
Private subscribers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Institutional subscribers	1.5	79.1	0.0	0.0	0.0	0.0	0.0	0.0
International tranche	0.0	526.7	0.0	0.0	0.0	0.0	0.0	0.0
Employees	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	96.0	0.0	0.0	96.0	0.0	0.0

1 Available data: May 2012.

Companies listed[1]

TABLE 1.3

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[2]
Total electronic market[3]	133	129	130	130	130	130	128	128
Of which, without Nuevo Mercado	133	129	130	130	130	130	128	128
Of which, Nuevo Mercado	0	0	0	0	0	0	0	0
Of which, foreign companies	5	6	7	7	7	7	7	7
Second Market	7	6	7	6	6	7	7	7
Madrid	2	2	2	2	2	2	2	2
Barcelona	5	4	5	4	4	5	5	5
Bilbao	0	0	0	0	0	0	0	0
Valencia	0	0	0	0	0	0	0	0
Open outcry ex SICAVs	29	28	27	28	27	27	24	24
Madrid	13	13	13	13	13	13	11	11
Barcelona	19	18	17	18	17	17	14	14
Bilbao	8	8	8	8	8	8	7	7
Valencia	6	6	6	6	6	6	4	4
Open outcry SICAVs	1	1	0	1	0	0	0	0
Alternative Stock Market (MAB)	3,251	3,144	3,083	3,091	3,088	3,083	3,064	3,059
Latibex	32	29	29	29	29	29	27	27

1 Data at the end of period.
2 Available data: May 2012.
3 Does not include ETFs (Exchange Traded Funds).

Capitalisation[1]

TABLE 1.4

Million euros	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[2]
Total electronic market[3]	531,194.2	565,585.2	498,148.1	609,135.8	568,142.8	498,148.1	487,334.8	388,205.2
Without Nuevo Mercado	531,194.2	565,585.2	498,148.1	609,135.8	568,142.8	498,148.1	487,334.8	388,205.2
Nuevo Mercado	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign companies[4]	61,317.5	100,249.8	82,471.4	103,403.8	1,357.3	82,471.4	90,381.7	79,454.0
Ibex 35	322,806.6	348,998.9	320,672.5	382,731.8	364,914.0	320,672.5	306,878.6	233,015.5
Second Market	109.9	74.6	59.7	57.5	74.9	59.7	56.8	57.8
Madrid	22.8	24.7	25.5	23.6	26.4	25.5	22.6	23.6
Barcelona	87.1	49.9	34.2	33.9	48.5	34.2	34.2	34.2
Bilbao	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Valencia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Open outcry ex SICAVs	5,340.7	4,128.2	3,704.9	3,835.4	3,859.2	3,704.9	3,482.1	3,329.1
Madrid	1,454.7	878.8	833.3	841.7	924	833.3	729.9	688.5
Barcelona	3,580.2	3,432.2	3,242.3	3,187.2	3,139.2	3,242.3	3,120.6	3,013.8
Bilbao	45.9	362.1	328.8	321.2	386.9	328.8	323.7	78.9
Valencia	760.4	458.7	240.2	423.6	475.2	240.2	423.5	379.6
Open outcry SICAVs[5]	126.8	32.6	0.0	36.1	30.9	0.0	0.0	0.0
Alternative Stock Market (MAB)[5]	24,718.6	26,340.8	23,646.0	2,6043.0	23,271.1	23,646.0	2,.524.4	23,356.0
Latibex	210,773.5	435,337.8	402,008.5	452,926.3	408,834.8	402,008.5	414,431.2	348,138.9

1 Data at the end of period.
2 Available data: May 2012.
3 Does not include ETFs (Exchange Traded Funds).
4 Foreign companies capitalisation includes their entire shares, whether they are deposited in Spain or not.
5 Calculated only with outstanding shares, not including treasury shares, because capital stock is not reported until the end of the year.

Trading

TABLE 1.5

				2011			2012	
Million euros	2009	2010	2011	II	III	IV	I	II[1]
Total electronic market[2]	877,073.5	1,026,478.5	917,383.3	236,325.4	232,254.4	203,895.2	175,186.1	135,185.6
Of which, without Nuevo Mercado	877,073.5	1,026,478.5	917,383.3	236,325.4	232,254.4	203,895.2	175,186.1	135,185.6
Of which, Nuevo Mercado	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Of which, foreign companies	4,750.4	6,415.3	5,206.3	1,056.0	1,255.1	1,515.3	1,505.8	689.2
Second Market	3.2	3.0	2.3	0.3	0.3	0.9	0.1	0.2
Madrid	2	2.8	1.7	0.1	0.3	0.8	0.1	0.2
Barcelona	1.2	0.3	0.5	0.2	0.0	0.0	0.0	0.0
Bilbao	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Valencia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Open outcry ex SICAVs	52.8	157.2	42.8	7.5	9.9	7.4	16.5	4.7
Madrid	16.5	15.7	16.1	1.8	7.7	2.1	1.6	0.4
Barcelona	29.4	135.7	26.4	5.6	2.1	5.2	14.4	4.2
Bilbao	1.1	3.9	0.1	0.0	0.0	0.0	0.0	0.0
Valencia	5.9	1.9	0.3	0.1	0.0	0.1	0.6	0.1
Open outcry SICAVs	19.7	8.1	5.6	3.0	0.8	0.0	0.0	0.0
Alternative Stock Market (MAB)	5,080.1	4,147.9	4,379.9	1,134.0	1,088.2	1,278.1	1,218.1	559.7
Latibex	434.7	521.2	357.7	89.4	93.1	72.9	73.3	40.3

1 Available data: May 2012.
2 Does not include ETFs (Exchange Traded Funds).

Trading on the electronic market by type of transaction[1]

TABLE 1.6

				2011			2012	
Million euros	2009	2010	2011	II	III	IV	I	II[2]
Regular trading	833,854.9	983,584.5	873,485.4	225,422.9	216,374.5	195,729.5	168,765.0	130,759.0
Orders	499,182.8	541,879.8	505,870.1	119,669.8	134,441.1	98,213.1	103,947.2	55,659.8
Put-throughs	51,335.8	58,678.1	69,410.4	13,555.7	17,797.8	15,534.7	12,028.9	21,341.1
Block trades	283,336.3	383,026.6	298,204.9	92,197.4	64,135.6	81,981.7	52,788.9	53,758.1
Off-hours	5,996.6	17,209.5	9,801.8	2,645.6	3,308.7	1,751.5	816.2	1,409.1
Authorised trades	4,695.6	2,660.5	3,492.6	676.6	1,212.2	760.5	1,026.7	1,027.4
Art. 36.1 SML trades	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tender offers	7,188.9	312.0	4,216.8	233.8	3,983.1	0.0	0.0	9.6
Public offerings for sale	1,325	1,448.2	3,922.1	0.0	3,922.1	0.0	0.0	0.0
Declared trades	5,202.6	2,273.4	2,212.7	2,171.6	30.4	10.7	0.0	464.1
Options	11,443.2	11,474.7	11,730.3	2,717.4	1,545.9	3,965.4	2,301.1	684.4
Hedge transactions	7,366.7	7,515.8	8,521.5	2,457.5	1,877.5	1,677.7	2,277.0	832.1

1 Does not include ETFs (Exchange Traded Funds).
2 Available data: May 2012.

Margin trading for sales and securities lending

TABLE 1.7

				2011			2012	
Million euros	2009	2010	2011	II	III	IV	I	II[1]
TRADING								
Securities lending[2]	471,007.1	556,246.7	493,602.4	142,262.8	122,207.6	120,570.9	98,303.7	84,774.3
Margin trading for sales of securities[3]	704.3	598.0	518.3	112.9	110.0	83.1	76.1	59.1
Margin trading for securities purchases[3]	106.4	65.9	73.0	11.4	17.2	24.7	16.0	5.4
OUTSTANDING BALANCE								
Securities lending[2]	47,322.2	36,195.9	35,626.7	39,553.6	33,213.4	35,626.7	29608.2	27903
Margin trading for sales of securities[3]	21.1	9.9	7.0	12.7	10.8	7.0	6.7	5.6
Margin trading for securities purchases[3]	5.6	5.0	3.9	5.2	3.2	3.9	3.9	3.6

1 Available data: May 2012.
2 Regulated by Article 36.7 of the Securities Market Act and Order ECO/764/2004.
3 Transactions performed in accordance with Ministerial Order dated 25 March 1991 on the margin system in spot transactions.

1.2 Fixed-income

Gross issues registered[1] at the CNMV

TABLE 1.8

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[2]
NUMBER OF ISSUERS								
Total	168	115	101	42	28	44	37	22
Mortgage covered bonds	27	25	30	15	9	16	12	4
Territorial covered bonds	1	6	7	4	2	5	6	5
Non-convertible bonds and debentures	50	39	23	12	6	9	15	9
Convertible bonds and debentures	3	2	5	1	0	2	1	2
Backed securities	68	36	34	9	9	14	5	1
Commercial paper	69	58	49	12	7	16	17	7
Of which, asset-backed	2	2	2	1	0	1	0	0
Of which, non-asset-backed	67	56	47	11	7	15	17	7
Other fixed-income issues	0	0	0	0	0	0	0	0
Preference shares	23	0	1	0	0	0	0	0
NUMBER OF ISSUES								
Total	512	349	356	82	58	128	117	54
Mortgage covered bonds	75	88	115	29	10	44	27	6
Territorial covered bonds	1	9	42	4	18	16	8	6
Non-convertible bonds and debentures	244	154	87	27	14	27	48	30
Convertible bonds and debentures	6	3	9	1	0	2	1	4
Backed securities	76	36	48	9	9	20	15	1
Commercial paper	73	59	53	12	7	19	18	7
Of which, asset-backed	2	2	2	1	0	1	0	0
Of which, non-asset-backed	71	57	51	11	7	18	18	7
Other fixed-income issues	0	0	0	0	0	0	0	0
Preference shares	37	0	2	0	0	0	0	0
NOMINAL AMOUNTS (million euros)								
Total	387,475.8	226,448.9	289,251.0	59,900.0	38,693.6	113,496.1	120,739.7	38,941.7
Mortgage covered bonds	35,573.9	34,378.5	67,226.5	18,980.0	5,250.0	23,742.5	26,000.0	6,200.0
Territorial covered bonds	500.0	5,900.0	22,334.2	1,800.0	7,437.2	10,162.0	3,200.0	2,100.0
Non-convertible bonds and debentures	62,249.0	24,356.0	20,191.7	3,320.2	981.0	13,312.4	31,304.9	7,571.5
Convertible bonds and debentures	3,200.0	968.0	7,125.9	1,500.0	0.0	4,944.3	1,128.2	1,592.3
Backed securities	81,651.2	63,260.5	68,412.8	11,168.4	10,449.3	20,210.1	9,195.3	135.3
Spanish tranche	77,289.4	62,743.0	62,796.1	10,130.0	10,115.6	18,844.3	7,810.3	135.3
International tranche	4,361.9	517.5	5,616.7	1,038.4	333.7	1,365.8	1,385.0	0.0
Commercial paper[3]	191,341.7	97,586.0	103,760.0	23,131.3	14,576.1	41,124.9	49,911.3	21,342.6
Of which, asset-backed	4,758.4	5,057.0	2,366.0	913.0	259.0	648.0	616.0	200.0
Of which, non-asset-backed	186,583.3	92,529.0	101,394.0	22,218.3	14,317.1	40,476.9	49,295.3	21,142.6
Other fixed-income issues	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Preference shares	12,960.0	0.0	200.0	0.0	0.0	0.0	0.0	0.0
Pro memoria:								
Subordinated issues	20,988.5	9,154.2	29,277.3	2,997.5	4,664.3	16,207.6	2,772.2	1,592.3
Underwritten issues	4,793.8	299.0	10.0	0.0	0.0	0.0	0.0	0.0

1 Includes issuance and trading prospectuses.
2 Available data: May 2012.
3 The figures for commercial paper refer to the amount placed in the year.

Issues admitted to trading on AIAF

TABLE 1.9

Nominal amounts in million euros	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[1]
Total	388,455.0	223,404.5	278,594.2	68,289.8	36,499.9	103,013.8	120,212.9	36,005.5
Commercial paper	191,427.7	99,784.4	102,042.0	23,094.5	13,827.9	40,023.5	51,871.2	21,415.7
Bonds and debentures	61,862.5	24,728.6	12,313.7	3,616.9	682.0	5,934.3	29,257.5	7,881.7
Mortgage covered bonds	35,568.9	32,861.0	68,346.5	21,435.0	6,425.0	23,242.5	28,000.0	3,200.0
Territorial covered bonds	500.0	5,900.0	20,334.2	300.0	5,543.2	11,556.0	2,000.0	1,600.0
Backed securities	85,542.9	60,030.5	75,357.8	19,843.4	10,021.9	22,257.5	9,084.3	1,908.0
Preference shares	13,552.9	100.0	200.0	0.0	0.0	0.0	0.0	0.0
Matador bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1 Available data: May 2012.

AIAF. Issuers, issues and outstanding balance

TABLE 1.10

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[1]
NUMBER OF ISSUERS								
Total	614	634	613	613	608	613	611	604
Commercial paper	67	60	45	46	50	45	51	47
Bonds and debentures	91	93	91	93	93	91	95	97
Mortgage covered bonds	29	33	43	36	39	43	47	47
Territorial covered bonds	11	12	13	12	12	13	16	17
Backed securities	442	459	437	441	433	437	427	423
Preference shares	60	59	60	60	60	60	60	60
Matador bonds	12	12	12	12	12	12	12	12
NUMBER OF ISSUES								
Total	4,084	3,630	4,382	3,454	3,536	4,382	5,116	5,247
Commercial paper	1,507	958	1,778	851	944	1,778	2,547	2,690
Bonds and debentures	611	645	624	627	630	624	628	626
Mortgage covered bonds	202	253	296	277	283	296	301	302
Territorial covered bonds	25	26	49	29	40	49	52	53
Backed securities	1,629	1,641	1,527	1,562	1,531	1,527	1,480	1,468
Preference shares	96	93	94	94	94	94	94	94
Matador bonds	14	14	14	14	14	14	14	14
OUTSTANDING BALANCE[2] (million euros)								
Total	870,981.1	850,181.7	882,395.1	849,569.3	844,342.4	882,395.1	906,229.5	888,037.3
Commercial paper	41,647.0	23,233.6	37,549.1	22,123.1	18,813.5	37,549.1	62,370.8	64,805.1
Bonds and debentures	150,886.3	146,077.7	131,756.8	136,241.1	131,918.0	131,756.8	144,455.8	134,743.0
Mortgage covered bonds	185,343.8	195,734.8	241,149.7	219,313.8	223,913.8	241,149.7	257,034.8	257,534.8
Territorial covered bonds	16,030.0	18,350.0	31,884.2	20,285.0	24,028.2	31,884.2	31,834.2	32,084.2
Backed securities	442,831.5	434,835.1	407,908.0	419,458.0	413,520.5	407,908.0	391,012.1	380,948.7
Preference shares	33,183.8	30,891.8	31,088.6	31,089.6	31,089.6	31,088.6	18,463.1	16,862.7
Matador bonds	1,058.8	1,058.8	1,058.8	1,058.8	1,058.8	1,058.8	1,058.8	1,058.8

1 Available data: May 2012.
2 Nominal amounts.

AIAF. Trading

TABLE 1.11

Nominal amounts in million euros	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[1]
BY TYPE OF ASSET								
Total	4,658,633.2	4,383,118.7	7,388,185.7	1,618,996.9	1,662,056.5	1,566,191.9	928,497.2	248,263.4
Commercial paper	533,331.0	385,238.9	227,534.5	57,492.7	49,896.0	52,885.6	57,736.6	27,937.3
Bonds and debentures	321,743.0	922,393.1	484,705.8	96,130.6	89,289.3	57,611.6	41,431.0	21,589.6
Mortgage covered bonds	263,150.0	271,441.8	662,177.0	115,484.5	105,436.4	271,366.9	247,459.2	62,802.1
Territorial covered bonds	7,209.0	14,458.2	544,780.9	43,117.1	68,254.4	400,645.2	179,057.4	57,693.5
Backed securities	3,527,486.4	2,784,775.4	5,462,806.2	1,303,425.0	1,348,043.0	783,200.2	394,669.6	73,599.7
Preference shares	5,668.5	4,635.7	6,065.0	3,337.6	1,085.5	463.6	8,132.1	4,370.0
Matador bonds	45.2	175.7	116.3	9.5	51.9	18.9	11.2	271.3
BY TYPE OF TRANSACTION								
Total	4,658,633.2	4,383,118.7	7,388,185.7	1,618,996.9	1,662,056.5	1,566,191.9	928,497.2	248,263.4
Outright	378,348.4	288,927.3	343,099.6	78,598.4	60,680.5	103,693.8	151,533.7	58,885.4
Repos	362,068.7	304,493.2	198,514.7	51,485.2	47,765.9	43,282.7	41,562.1	21,701.1
Sell-buybacks/Buy-sellbacks	3,918,216.1	3,789,698.3	6,846,571.5	1,488,913.3	1,553,610.1	1,419,215.4	735,401.4	167,676.8

1 Available data: May 2012.

AIAF. Third-party trading. By purchaser sector

TABLE 1.12

Nominal amounts in million euros	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[1]
Total	681,946.6	553,896.6	487,543.3	120,560.2	99,716.4	130,860.7	157,876.8	73,263.0
Non-financial companies	256,224.6	162,949.5	131,765.2	37,287.8	30,082.8	28,031.9	21,411.0	11,288.9
Financial institutions	298,909.1	289,950.4	256,975.8	55,419.8	52,743.5	81,015.3	103,512.7	46,674.6
Credit institutions	125,547.5	102,372.1	139,538.2	27,624.9	25,982.2	51,571.4	69,411.4	30,446.7
CIS, insurance and pension funds	115,865.3	125,899.4	103,899.9	25,796.8	25,835.3	27,756.3	32,613.5	15,368.2
Other financial institutions	57,496.3	61,678.9	13,537.7	1,998.1	926.0	1,687.6	1,487.8	859.7
General government	5,808.5	3,117.7	2,602.7	392.8	1,336.2	577.9	3,372.9	383.7
Households and NPISHs[2]	14,647.8	14,244.4	10,230.3	2,817.3	1,846.8	3,699.4	2,793.4	1,616.2
Rest of the world	106,356.6	83,634.6	85,969.3	24,642.5	13,707.1	17,536.3	26,786.8	13,299.6

1 Available data: May 2012.
2 Non-profit institutions serving households.

Issues admitted to trading on equity markets[1]

TABLE 1.13

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[2]
NOMINAL AMOUNTS (million euros)								
Total	5,866.8	868.0	2,681.6	681.6	1,500.0	0.0	4,875.9	1,109.4
Non-convertible bonds and debentures	0.0	400.0	0.0	0.0	0.0	0.0	0.0	0.0
Convertible bonds and debentures	4,510.8	468.0	2,681.6	681.6	1,500.0	0.0	4,875.9	1,109.4
Backed securities	1,356.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NUMBER OF ISSUES								
Total	10	8	6	4	1	0	2	1
Non-convertible bonds and debentures	0	7	0	0	0	0	0	0
Convertible bonds and debentures	4	1	6	4	1	0	2	1
Backed securities	6	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0

1 Private issuers. Includes issuance and trading prospectuses.
2 Available data: May 2012.

Equity markets. Issuers, issues and outstanding balances

TABLE 1.14

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[1]
NUMBER OF ISSUERS								
Total	62	60	59	59	59	59	57	57
Private issuers	48	46	46	46	46	46	44	44
Non-financial companies	6	5	4	4	4	4	4	4
Financial institutions	42	41	42	42	42	42	40	40
General government[2]	14	14	13	13	13	13	13	13
Regional governments	3	3	3	3	3	3	3	3
NUMBER OF ISSUES								
Total	269	247	240	245	243	240	231	226
Private issuers	155	145	133	137	134	133	126	126
Non-financial companies	10	7	6	7	7	6	6	5
Financial institutions	145	138	127	130	127	127	120	121
General government[2]	114	102	107	108	109	107	105	100
Regional governments	76	64	74	72	74	74	73	69
OUTSTANDING BALANCES[3] (million euros)								
Total	36,299.5	41,091.3	43,817.5	45,280.8	43,183.1	43,817.5	47,939.8	46,959.1
Private issuers	21,600.9	19,261.5	17,759.6	19,017.9	17,524.3	17,759.6	21,694.6	21,154.7
Non-financial companies	1,783.7	376.6	375.4	375.8	375.8	375.4	375.4	195.1
Financial institutions	19,817.2	18,884.8	17,384.2	18,642.1	17,148.5	17,384.2	21,319.2	20,959.6
General government[2]	14,698.6	21,829.9	26,057.8	26,262.9	25,658.8	26,057.8	26,245.2	25,804.4
Regional governments	12,338.3	19,442.4	24,014.4	23,992.9	23,489.5	24,014.4	24,276.9	23,936.1

1 Available data: May 2012.
2 Without public book-entry debt.
3 Nominal amounts.

Trading on equity markets

TABLE 1.15

Nominal amounts in million euros	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[1]
Electronic market	633.0	504.5	385.4	85.9	98.8	108.9	131.6	720.2
Open outcry	4,008.4	7,525.6	4,942.5	597.7	409.0	1,537.2	2,101.8	329.8
Madrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Barcelona	3,821.1	7,146.7	4,885.4	578.6	398.3	1,529.1	1,813.8	328
Bilbao	4.6	2.3	0.5	0.1	0.1	0.1	0.1	0.0
Valencia	182.7	376.6	56.6	18.9	10.7	8.0	287.8	1.7
Public book-entry debt	49.1	331.1	883.4	187.8	471.8	219.4	396.6	136.8
Regional governments debt	70,065.8	62,029.0	63,443.7	16,846.2	14,624.3	20,157.2	13,144.2	11,085.3

1 Available data: May 2012.

Organised trading systems: SENAF y MTS. Public debt trading by type

TABLE 1.16

Nominal amounts in million euros	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[1]
Total	202,120.5	265,966.0	84,090.9	28,318.9	17,039.0	11,139.9	18,979.0	7,095.0
Outright	114,314.0	110,011.0	81,905.0	26,482.0	17,039.0	11,091.0	18,979.0	7,095.0
Sell-buybacks/Buy-sellbacks	86,806.5	155,433.0	2,185.9	1,836.9	0.0	48.9	0.0	0.0
Others	1,000.0	522.0	0.0	0.0	0.0	0.0	0.0	0.0

1 Available data: May 2012.

1.3 Derivatives and other products

1.3.1 Financial derivatives markets: MEFF

Trading on MEFF

TABLE 1.17

Number of contracts	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[1]
Debt products	18	14	18	4	4	4	2	1,139
Debt futures[2]	18	14	18	4	4	4	2	1,139
Ibex 35 products[3,4]	6,187,544	6,946,167	5,822,418	1,404,588	1,635,571	1,067,066	1,120,323	1,281,158
Ibex 35 plus futures	5,436,989	6,280,999	5,291,956	1,280,699	1,484,184	951,801	1,022,021	1,147,618
Ibex 35 mini futures	314,829	357,926	307,411	72,265	91,073	54,025	49,547	65,210
Ibex 35 dividend impact futures	–	–	3,154	1,400	499	100	555	0
Call mini options	230,349	122,158	86,096	19,733	25,590	23,167	18,669	35,659
Put mini options	205,377	185,083	133,801	30,491	34,225	37,973	29,532	32,670
Stock products[5]	80,114,693	57,291,482	55,082,944	12,414,999	11,294,858	14,999,005	16,534,500	7,309,301
Futures	44,586,779	19,684,108	24,758,956	5,337,121	5,510,377	5,905,419	7,087,730	3,248,727
Stock dividend futures	–	–	–	–	–	–	1,500	0
Call options	18,864,840	17,186,515	12,050,946	2,618,584	2,365,550	3,305,166	4,333,910	1,828,731
Put options	16,663,074	20,420,859	18,273,042	4,459,294	3,418,931	5,788,420	5,111,360	2,231,843
Pro-memoria: MEFF trading on Eurex								
Debt products[6]	558,848	373,113	267,713	75,174	56,239	45,895	39,172	29,565
Index products[7]	835,159	604,029	451,016	96,795	137,083	110,587	78,776	45,365

1 Available data: May 2012.
2 Contract size: 100 thousand euros.
3 The number of Ibex 35 mini futures (multiples of 1 euro) was standardised to the size of the Ibex 35 plus futures (multiples of 10 euros).
4 Contract size: Ibex 35 * 10 euros.
5 Contract size: 100 shares.
6 Bund, Bobl and Schatz futures.
7 Dax 30, DJ EuroStoxx 50 and DJ Stoxx 50 futures.

1.3.2 Warrants, option buying and selling contracts, and ETF (Exchange Traded Funds)

Issues registered at the CNMV

TABLE 1.18

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[1]
WARRANTS[2]								
Premium amount (million euros)	5,165.1	4,915.3	5,544.6	891.4	1,491.8	1,986.8	922.4	1,100.8
On stocks	2,607.1	2,537.4	3,211.7	462.2	804.6	1,278.1	509.7	600.9
On indexes	2,000.1	1,852.6	1,786.8	293.9	504.9	600.1	310.3	422.0
Other[3]	558.0	525.4	546.0	135.2	182.2	108.6	102.4	77.8
Number of issues	7,342	8,375	9,237	1,842	2,305	3,144	1,733	1,440
Number of issuers	9	9	9	6	6	7	6	3
OPTION BUYING AND SELLING CONTRACTS								
Nominal amounts (million euros)	35.0	64.0	0.0	0.0	0.0	0.0	0.0	0.0
On stocks	25.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0
On indexes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other[3]	10.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
Number of issues	3	7	0	0	0	0	0	0
Number of issuers	1	1	0	0	0	0	0	0

1 Available data: May 2012.
2 Includes issuance and trading prospectuses.
3 Includes the following underlyings: baskets of securities, exchange rates, interest rates and commodities.

Equity markets. Warrants and ETF trading

TABLE 1.19

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[1]
WARRANTS								
Trading (million euros)	1,768.4	1,603.2	1,550.2	286.0	452.9	344.9	243.4	117.4
On Spanish stocks	809.9	759.8	654.2	129.8	175.1	136.8	103.7	48.3
On foreign stocks	97.6	60.7	97.8	15.3	23.0	35.8	34.3	10.9
On indexes	761.2	689.5	518.2	75.3	149.9	136	75.7	51.7
Other[2]	99.7	93.2	280.0	65.6	104.9	36.4	29.8	6.5
Number of issues[3]	8,038	7,750	13,165	3,038	3,940	3,441	3,176	2,550
Number of issuers[3]	10	10	9	9	9	9	9	9
CERTIFICATES								
Trading (million euros)	39.2	22	92.1	9.3	56.2	22.5	6.5	3.8
Number of issues[3]	22	16	32	10	7	4	4	4
Number of issuers[3]	4	2	2	2	2	2	2	2
ETF								**0**
Trading (million euros)	3,470.6	6,229.7	3,495.4	571.1	815.5	1,027.0	1,027.0	636.0
Number of funds	32	65	75	67	67	75	75	75
Assets[4] (million euros)	1,648.4	827.8	327.2	867.3	710.2	327.2	297.4	n.a.

1 Available data: May 2012.
2 Includes the following underlying: baskets of stocks, exchange rates, interest rates and commodities.
3 Issues or issuers which were traded in each period.
4 Assets from national ETFs is only included because assets from foreign ones are not available.
n.a.: No available data.

1.3.3 Non-financial derivatives

Trading on MFAO[1]

TABLE 1.20

Number of contracts	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[2]
On olive oil								
Extra-virgin olive oil futures[3]	135,705	165,840	63,173	16,401	13,951	9,701	10,050	6,502

1 Olive oil futures market (MFAO).
2 Available data: May 2012.
3 Nominal amount of the contract: 1,000 kg.

2 Investment services

Investment services. Spanish firms, branches and agents

TABLE 2.1

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[1]
BROKER-DEALERS								
Spanish firms	50	50	49	50	50	49	48	48
Branches	78	80	78	79	79	78	23	26
Agents	6,102	6,560	6,589	6,518	6,520	6,589	6,516	6,524
BROKERS								
Spanish firms	50	45	45	45	45	45	45	45
Branches	9	13	14	13	13	14	12	13
Agents	638	689	655	652	655	655	620	640
PORTFOLIO MANAGEMENT COMPANIES								
Spanish firms	9	6	6	6	6	6	6	6
Branches	5	5	5	5	5	5	5	5
Agents	5	2	2	2	2	2	2	2
FINANCIAL ADVISORY FIRMS[2]								
Spanish firms	16	58	82	64	78	82	91	95
CREDIT INSTITUTIONS[3]								
Spanish firms	193	186	187	189	188	187	190	190

1 Available data: May 2012.
2 Investment services company created by Act 47/2008, of 19 December, which modifies Act 24/1988, of 28 July, on the Securities Market, and regulated by Circular CR CNMV 10/2008, of 30 December.
3 Source: Bank of Spain.

Investment services. Foreign firms

TABLE 2.2

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[1]
Total	2,346	2,671	2,814	2,743	2,786	2,814	2,861	2,905
European Economic Area investment services firms	1,922	2,238	2,377	2,303	2,346	2,377	2,418	2,455
Branches	36	40	36	40	39	36	36	35
Free provision of services	1,886	2,198	2,341	2,263	2,307	2,341	2,382	2,420
Credit institutions[2]	424	433	437	440	440	437	443	450
From EU member states	414	423	429	430	430	429	434	441
Branches	53	55	55	56	55	55	55	56
Free provision of services	360	368	374	374	375	374	379	385
Subsidiaries of free provision of services institutions	1	0	0	0	0	0	0	0
From non-EU states	10	10	8	10	10	8	9	9
Branches	8	8	7	8	8	7	7	7
Free provision of services	2	2	1	2	2	1	2	2

1 Available data: May 2012.
2 Source: Bank of Spain and CNMV.

Intermediation of spot transactions[1]

TABLE 2.3

	I 2011				I 2012			
Million euros	Spanish organised markets	Other Spanish markets	Foreign markets	Total	Spanish organised markets	Other Spanish markets	Foreign markets	Total
FIXED-INCOME								
Total	789,654	2,506,345	219,799	3,515,798	810,305	1,711,998	185,670	2,707,973
Broker-dealers	102,744	728,516	165,603	996,863	126,744	479,484	114,729	720,957
Brokers	686,910	1,777,829	54,196	2,518,935	683,561	1,232,514	70,941	1,987,016
EQUITY								
Total	258,103	1,123	22,028	281,254	168,501	618	15,910	185,029
Broker-dealers	252,482	998	20,878	274,358	164,298	431	14,580	179,309
Brokers	5,621	125	1,150	6,896	4,203	187	1,330	5,720

1 Period accumulated data. Quarterly.

Intermediation of derivative transactions[1,2]

TABLE 2.4

Million euros	I 2011 Spanish organised markets	Foreign organised markets	Non-organised markets	Total	I 2012 Spanish organised markets	Foreign organised markets	Non-organised markets	Total
Total	1,000,337	2,347,288	301,303	3,648,928	465,908	1,277,144	117,791	1,860,843
Broker-dealers	998,629	1,461,542	210,192	2,670,363	464,070	1,098,028	74,092	1,636,190
Brokers	1,708	885,746	91,111	978,565	1,838	179,116	43,699	224,653

1 The amount of the buy and sell transactions of financial assets, financial futures on values and interest rates, and other transactions on interest rates will be the securities nominal or notional value or the principal to which the contract reaches. The amount of the transactions on options will be the strike price of the underlying asset multiplied by the number of instruments committed.
2 Period accumulated data. Quarterly.

Portfolio management. Number of portfolios and assets under management[1]

TABLE 2.5

	I 2011 CIS[2]	Other[3]	Total	I 2012 CIS[2]	Other[3]	Total
NUMBER OF PORTFOLIOS						
Total	143	13,201	13,344	144	11,570	11,714
Broker-dealers	92	7,310	7,402	83	4,681	4,764
Brokers	46	3,887	3,933	56	3,671	3,727
Portfolio management companies	5	2,004	2,009	5	3,218	3,223
ASSETS UNDER MANAGEMENT (thousand euros)						
Total	2,045,534	7,621,231	9,666,765	2,147,924	7,597,017	9,744,941
Broker-dealers	1,154,269	3,220,420	4,374,689	927,511	2,963,183	3,890,694
Brokers	777,950	1,552,231	2,330,181	1,117,723	1,561,719	2,679,442
Portfolio management companies	113,315	2,848,580	2,961,895	102,690	3,072,115	3,174,805

1 Data at the end of period. Quarterly.
2 Includes both direct management and management through agreements delegating management of assets of resident CIS, as well as management of non-resident CIS.
3 Includes the rest of clients, both covered and not covered by the Investment Guarantee Fund, as established in Royal Decree 948/2001, of 3 August, on investor compensation systems.

Financial advice. Number of contracts and assets advised[1]

TABLE 2.6

	I 2011 Retail clients	Professional clients	Total[2]	I 2012 Retail clients	Professional clients	Total[2]
NUMBER OF CONTRACTS						
Total	7,146	81	7,250	7,706	129	7,856
Broker-dealers	1,419	3	1,428	1,427	12	1,444
Brokers	4,717	69	4,803	4,784	107	4,907
Portfolio management companies	1,010	9	1,019	1,495	10	1,505
ASSETS ADVISED (thousand euros)						
Total	2,840,216	4,530,031	7,785,460	3,623,905	4,578,741	8,570,567
Broker-dealers	491,112	39,821	936,615	891,980	66,060	1,252,394
Brokers	1,875,935	1,098,637	2,984,103	2,081,895	1,059,386	3,214,848
Portfolio management companies	473,169	3,391,573	3,864,742	650,030	3,453,295	4,103,325

1 Data at the end of period. Quarterly.
2 Includes retail, professional and other clients.

Aggregated income statement. Broker-dealers

TABLE 2.7

			2011				2012	
Thousand euros[1]	2009	2010	2011	II	III	IV	I	II[2]
I. Interest income	163,272	102,054	91,542	52,973	77,901	91,542	7,206	11,260
II. Net commission	562,082	533,858	490,517	275,520	382,225	490,517	119,252	157,639
Commission revenues	782,214	798,152	776,641	419,375	606,095	776,641	181,674	241,767
Brokering	548,362	555,207	529,711	285,047	417,529	529,711	121,864	159,599
Placement and underwriting	26,326	8,499	7,446	2,830	5,113	7,446	2,686	4,157
Securities deposit and recording	16,183	22,367	21,060	10,887	15,821	21,060	4,738	6,246
Portfolio management	11,768	13,880	16,186	7,911	11,867	16,186	3,658	4,730
Design and advising	60,477	53,722	60,713	39,550	49,366	60,713	13,545	16,007
Stocks search and placement	10	36	484	184	484	484	0	0
Market credit transactions	14	9	8	4	6	8	4	4
CIS marketing	63,341	65,487	59,588	31,359	45,594	59,588	12,237	15,976
Other	55,733	78,944	81,445	41,601	60,315	81,445	22,942	35,048
Commission expenses	220,133	264,294	286,124	143,855	223,870	286,124	62,422	84,128
III. Financial investment income	45,266	48,588	271,955	38,782	150,060	271,955	109	31,381
IV. Net exchange differences and other operating products and expenses	21,820	26,081	-194,355	-5,173	-115,556	-194,355	36,110	2,661
V. Gross income	792,440	710,580	659,659	362,102	494,630	659,659	162,677	202,942
VI. Operating income	339,706	276,253	207,379	142,774	174,724	207,379	44,100	52,912
VII. Earnings from continuous activities	250,984	196,834	148,553	121,402	149,362	148,553	40,969	48,165
VIII. Net earnings of the period	250,984	196,834	148,553	121,402	149,362	148,553	40,969	48,165

1 Accumulated data from the beginning of the year to the last day of every quarter. It includes companies removed throughout the year.
2 Available data: April 2012.

Results of proprietary trading. Broker-dealers

TABLE 2.8

	Interest margin		Financial investment		Exchange differences and other items		Total	
Thousand euros[1]	I 2011	I 2012	I 2011	I 2012	I 2011	I 2012	I 2011	I 2012
Total	15,186	7,206	28,084	110	293	34,600	43,563	41,916
Money market assets and public debt	355	712	3,419	4,975	–	–	3,774	5,687
Other fixed-income securities	7,615	4,818	2,952	15,479	–	–	10,567	20,297
Domestic portfolio	6,887	4,323	996	11,783	–	–	7,883	16,106
Foreign portfolio	728	495	1,956	3,696	–	–	2,684	4,191
Equities	4,687	2,021	-137,378	129,313	–	–	-132,691	131,334
Domestic portfolio	3,094	211	10,974	1,836	–	–	14,068	2,047
Foreign portfolio	1,593	1,810	-148,352	127,477	–	–	-146,759	129,287
Derivatives	–	–	155,168	-149,339	–	–	155,168	-149,339
Repurchase agreements	130	-987	–	–	–	–	130	-987
Market credit transactions	0	0	–	–	–	–	0	0
Deposits and other transactions with financial Intermediaries	3,602	2,216	–	–	–	–	3,602	2,216
Net exchange differences	–	–	–	–	1,702	29,760	1,702	29,760
Other operating products and expenses	–	–	–	–	388	6,350	388	6,350
Other transactions	-1,203	-1,574	3,923	-318	-1,797	-1,510	923	-3,402

1 Accumulated data from the beginning of the year to the last day of every quarter. It includes companies removed throughout the year.

Aggregated income statement. Brokers

TABLE 2.9

Thousand euros[1]	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[2]
I. Interest income	2,652	1,629	2,480	1,144	1,761	2,480	349	487
II. Net commission	127,410	109,165	97,884	50,423	73,058	97,884	24,587	32,375
Commission revenues	144,373	126,055	112,349	57,899	84,174	112,349	28,112	37,047
Brokering	53,988	38,176	36,354	19,345	27,974	36,354	9,586	12,202
Placement and underwriting	2,989	2,748	2,870	1,181	2,289	2,870	751	1,393
Securities deposit and recording	509	366	440	191	288	440	103	247
Portfolio management	19,633	19,489	12,351	6,760	9,572	12,351	2,903	3,973
Design and advising	2,806	3,618	5,349	2,634	4,007	5,349	1,249	1,625
Stocks search and placement	0	304	61	538	61	61	0	0
Market credit transactions	28	27	42	13	24	42	7	8
CIS marketing	23,966	23,946	21,381	11,097	16,514	21,381	4,915	6,720
Other	40,453	37,381	33,501	16,141	23,445	33,501	8,598	10,880
Commission expenses	16,963	16,890	14,465	7,476	11,116	14,465	3,525	4,672
III. Financial investment income	1,709	456	623	-54	-293	623	123	843
IV. Net exchange differences and other operating products and expenses	-1,111	-1,416	-1,539	-1,306	-1,446	-1,539	-339	-467
V. Gross income	130,661	109,834	99,448	50,207	73,080	99,448	24,720	33,238
VI. Operating income	9,090	9,457	7,757	5,568	6,168	7,757	2,193	3,551
VII. Earnings from continuous activities	4,862	6,452	5,488	5,289	6,232	5,488	1,989	3,339
VIII. Net earnings of the period	4,862	6,452	5,488	5,289	6,232	5,488	1,989	3,339

1 Accumulated data from the beginning of the year to the last day of every quarter. It includes companies removed throughout the year.
2 Available data: April 2012.

Aggregated income statement. Portfolio management companies

TABLE 2.10

Thousand euros[1]	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[2]
I. Interest income	341	407	682	293	485	682	215	278
II. Net commission	10,734	10,097	7,987	3,840	5,698	7,987	1,873	2,508
Commission revenues	21,750	20,994	18,476	9,123	13,568	18,476	4,428	5,926
Portfolio management	18,463	18,020	16,582	8,323	12,367	16,582	4,078	5,435
Design and advising	2,698	1,160	1,894	800	1,201	1,894	350	491
CIS marketing	18	34	0	0	0	0	0	0
Other	571	1,779	0	0	0	0	0	0
Commission expenses	11,016	10,897	10,489	5,283	7,870	10,489	2,555	3,418
III. Financial investment income	92	51	186	233	192	186	-19	-46
IV. Net exchange differences and other operating products and expenses	-383	21	-10	-19	-41	-10	-4	7
V. Gross income	10,784	10,577	8,845	4,347	6,334	8,845	2,065	2,747
VI. Operating income	1,296	1,154	1,525	677	886	1,525	262	364
VII. Earnings from continuous activities	889	939	1,041	490	627	1,041	194	250
VIII. Net earnings of the period	889	939	1,041	490	627	1,041	194	250

1 Accumulated data from the beginning of the year to the last day of every quarter. It includes companies removed throughout the year.
2 Available data: April 2012.

Surplus equity over capital adequacy requirements[1]

TABLE 2.11

	Surplus		Number of companies according to its surplus percentage									
Thousand euros	Total amount	%[2]	< 50	< 100	< 150	< 200	< 300	< 400	< 500	< 750	< 1000	> 1000
Total	1,194,826	299.35	14	22	7	6	14	10	5	11	3	7
Broker-dealers	1,115,586	320.42	2	7	3	2	11	7	3	6	2	5
Brokers	61,927	176.62	12	12	4	4	2	2	2	5	1	1
Portfolio management companies	17,314	108.74	0	3	0	0	1	1	0	0	0	1

1 Available data: March 2012.
2 Average percentage is weighted by the required equity of each company. It is an indicator of the number of times, in percentage terms, that the surplus contains the required equity in an average company.

Return on equity (ROE) before taxes[1,2]

TABLE 2.12

		Number of companies according to its annualized return							
	Average[3]	Losses	0-5%	6-15%	16-30%	31-45%	46-60%	61-75%	76-100%	> 100%
Total	11.98	38	17	18	13	5	0	4	2	2
Broker-dealers	12.39	14	12	9	8	1	0	2	2	0
Brokers	8.28	21	3	8	5	4	0	2	0	2
Portfolio management companies	3.14	3	2	1	0	0	0	0	0	0

1 ROE has been calculated as:

$$ROE = \frac{Profit\ before\ tax\ (annualised)}{Equity}$$

Equity = Share capital + paid-in surplus + Reserves - Treasury stock + Previous years' profits and retained earnings – Dividends and remuneration.
2 Available data: March 2012.
3 Average weighted by equity, in %.

Financial advisory firms. Main figures

TABLE 2.13

				2010		2011	
Thousand euros	2009	2010	2011	I	II	I	II
ASSETS ADVISED[1]							
Total	1,410,985	15,802,743	17,206,331	11,929,643	15,802,743	16,498,814	17,206,331
Retail clients	364,284	1,715,084	2,168,957	1,164,130	1,715,084	1,895,320	2,168,957
Professional	1,046,702	13,995,206	13,963,983	10,746,313	13,995,206	14,501,823	13,963,983
Other	0	92,453	1,073,391	19,200	92,453	101,671	1,073,391
COMMISSION INCOME[2]							
Total	3,183	20,745	29,778	7,783	20,745	14,116	29,778
Commission revenues	3,183	20,629	29,586	7,726	20,629	14,080	29,586
Other income	0	116	192	57	116	36	192
EQUITY							
Total	1,500	10,057	11,475	9,312	10,057	10,469	11,475
Share capital	1,043	3,014	3,895	2,379	3,014	3,386	3,895
Reserves and retained earnings	36	242	1,186	3,333	242	2,915	1,186
Income for the year[2]	421	6,801	6,394	3,600	6,801	4,168	6,394

1 Data at the end of each period. Half-yearly.
2 Accumulated data from the beginning of the year to the last day of every semester.

3 Collective investment schemes[a]

Number, management companies and depositories of collective investment schemes registered at the CNMV

TABLE 3.1

				2011			2012	
	2009	2010	2011	II	III	IV	I	II[1]
Total financial CIS	5,892	5,627	5,460	5,551	5,491	5,460	5,422	5,389
Mutual funds	2,593	2,429	2,341	2,410	2,356	2,341	2,317	2,291
Investment companies	3,232	3,133	3,056	3,077	3,070	3,056	3,041	3,035
Funds of hedge funds	38	32	27	28	28	27	27	27
Hedge funds	29	33	36	36	37	36	37	36
Total real estate CIS	16	16	14	16	15	14	14	14
Real estate investment funds	8	8	6	8	6	6	6	6
Real estate investment companies	8	8	8	8	9	8	8	8
Total foreign CIS marketed in Spain	582	660	739	695	695	739	748	752
Foreign funds marketed in Spain	324	379	426	395	395	426	428	427
Foreign companies marketed in Spain	258	281	313	300	300	313	320	325
Management companies	120	123	114	118	117	114	113	112
CIS depositories	124	114	97	107	101	97	92	92

1 Available data: May 2012.

Number of unit-holders and shareholders of collective investment schemes

TABLE 3.2

				2011			2012	
	2009	2010	2011	II	III	IV	I[1]	II[2]
Total financial CIS	5,895,009	5,578,524	5,248,683	5,460,738	5,358,838	5,249,813	5,173,638	5,143,015
Mutual funds	5,475,403	5,160,889	4,834,061	5,044,106	4,942,074	4,835,193	4,759,241	4,728,102
Investment companies	419,606	417,635	414,622	416,632	416,764	414,620	414,397	414,913
Total real estate CIS	84,511	76,223	30,678	32,906	32,356	30,678	30,693	31,108
Real estate investment funds	83,583	75,280	29,735	31,963	31,412	29,735	29,754	30,169
Real estate investment companies	928	943	943	943	944	943	939	939
Total foreign CIS marketed in Spain[3]	685,094	865,767	761,380	856,882	803,801	761,380	768,467	–
Foreign funds marketed in Spain	139,102	193,233	177,832	195,525	185,665	177,832	175,621	–
Foreign companies marketed in Spain	545,992	666,534	583,548	661,357	618,136	583,548	592,846	–

1 Provisional data for foreign CIS marketed in Spain.
2 Available data: April 2012. This data is sent quarterly by foreign CIS and so the months which do not coincide with the end of the quarter have no available data.
3 Exchange traded funds (ETFs) data is not included.

CIS total net assets

TABLE 3.3

				2011			2012	
Million euros	2009	2010	2011	II	III	IV	I[1]	II[2]
Total financial CIS	196,472.5	170,073.1	155,982.6	166,446.6	157,942.6	155,982.6	156,460.3	153,043.6
Mutual funds[3]	170,547.7	143,918.2	132,368.6	140,351.3	134,033.7	132,368.6	131,994.5	129,843.6
Investment companies	25,924.8	26,155.0	23,614.0	26,095.4	23,908.9	23,614.0	24,465.8	23,956.4
Total real estate CIS	6,773.7	6,437.5	4,807.1	6,313.7	6,260.8	4,807.1	4,757.7	4,748.3
Real estate investment funds	6,465.1	6,115.6	4,494.6	5,995.5	4,597.3	4,494.6	4,446.9	4,434.0
Real estate investment companies	308.6	321.9	312.5	318.2	1,663.4	312.5	310.8	314.3
Total foreign CIS marketed in Spain[4]	25,207.2	36,692.9	29,969.5	35,582.2	30,967.3	29,969.5	31,835.1	–
Foreign funds marketed in Spain	5,215.1	8,535.9	6,382.9	7,303.2	6,446.0	6,382.9	6,583.3	–
Foreign companies marketed in Spain	19,992.0	28,156.9	23,586.6	28,279.0	24,521.3	23,586.6	25,251.9	–

1 Provisional data for foreign CIS marketed in Spain.
2 Available data: April 2012.
3 The assets of mutual funds invested in other financial mutual funds of the same management company were around 3.6 billion euros at March 2012.
4 Exchange traded funds (ETFs) data is not included.

a The references to "Mutual funds" throughout the chapter do not include hedge funds or funds of hedge funds.

Mutual funds asset allocation[1]

TABLE 3.4

				2011				2012
Million euros	2009	2010	2011	I	II	III	IV	I[2]
Asset	170,547.7	143,918.2	132,368.6	144,428.0	140,351.3	134,033.7	132,368.6	131,994.5
Portfolio investment	163,165.5	137,295.4	126,370.0	137,441.4	133,666.7	127,577.1	126,370.0	125,415.1
Domestic securities	100,642.6	89,630.2	90,394.3	92,205.9	91,324.1	90,914.4	90,394.3	88,309.9
Debt securities	74,628.9	68,575.1	72,076.1	71,784.6	70,905.2	72,151.4	72,076.1	71,341.6
Shares	4,741.0	3,829.2	3,087.0	3,990.4	3,944.8	3,179.1	3,087.0	2,896.1
Investment collective schemes	9,041.5	7,338.6	6,038.5	6,338.4	6,387.3	6,192.3	6,038.5	3,831.3
Deposits in Credit institutions	11,552.2	9,460.8	8,961.2	9,635.7	9,665.8	9,208.1	8,961.2	10,049.9
Derivatives	679.0	426.2	231.5	456.5	420.9	183.4	231.5	191.0
Other	0.0	0.4	0.0	0.3	0.0	0.0	0.0	0.0
Foreign securities	62,487.1	47,626.5	35,968.1	45,198.1	42,330.3	36,656.4	35,968.1	37,094.3
Debt securities	48,435.3	30,337.4	22,713.6	26,875.7	24,576.1	23,293.2	22,713.6	22,699.0
Shares	7,783.2	8,385.8	7,037.3	8,604.6	8,758.1	6,694.9	7,037.3	7,443.8
Investment collective schemes	5,666.4	8,404.7	6,061.6	9,252.4	8,548.4	6,581.2	6,061.6	6,742.9
Deposits in Credit institutions	82.4	108.0	23.0	85.6	61.2	53.7	23.0	58.8
Derivatives	518.7	387.1	131.6	376.5	384.2	31.4	131.6	149.1
Other	1.1	3.6	1.1	3.3	2.4	2.0	1.1	0.7
Doubtful assets and matured investment	35.8	38.6	7.5	37.4	12.2	6.3	7.5	10.9
Intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net fixed assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash	7,267.7	6,531.4	5,837.6	6,876.8	6,459.0	6,000.3	5,837.6	6,398.4
Net balance (debtors/creditors)	114.5	91.4	161.1	109.8	225.5	456.3	161.1	181.0

1 Hedge funds and funds of hedge funds are not included in these figures due to the entry into force, on 31 December 2008, of Circular CR CNMV 3/2008 which establishes a different deadline in reporting accounting information to CNMV.
2 Provisional data.

Investment companies asset allocation

TABLE 3.5

				2011				2012
Million euros	2009	2010	2011	I	II	III	IV	I[1]
Asset	25,924.8	26,155.0	23,614.0	26,491.4	26,095.4	23,908.9	23,614.0	24,465.8
Portfolio investment	24,813.5	25,187.3	22,521.9	25,262.0	24,915.3	22,592.7	22,521.9	23,175.1
Domestic securities	13,514.3	12,881.4	12,385.0	12,863.2	12,848.1	12,405.1	12,385.0	12,696.4
Debt securities	7,400.5	5,435.9	7,460.8	5,870.6	6,628.9	7,021.7	7,460.8	7,415.3
Shares	3,376.3	2,988.6	2,508.5	3,033.8	2,993.4	2,663.5	2,508.5	2,385.9
Investment collective schemes	1,091.1	758.7	667.4	800.9	815.7	741.8	667.4	695.3
Deposits in Credit institutions	1,631.5	3,675.2	1,721.7	3,133.2	2,381.5	1,963.5	1,721.7	2,164.7
Derivatives	-6.6	-5.9	-5.5	-4.9	-2.1	-17.0	-5.5	1.9
Other	21.7	29.0	32.2	29.6	30.6	31.6	32.2	33.4
Foreign securities	11,294.2	12,298.1	10,131.3	12,391.9	12,061.0	10,181.8	10,131.3	10,472.7
Debt securities	4,606.6	3,606.8	3,070.6	3,407.6	3,241.5	2,948.1	3,070.6	2,966.5
Shares	3,559.3	4,166.0	3,384.3	4,381.9	4,264.5	3,432.9	3,384.3	3,493.5
Investment collective schemes	2,987.4	4,390.5	3,516.3	4,416.0	4,349.3	3,670.2	3,516.3	3,838.7
Deposits in Credit institutions	26.3	12.1	10.8	47.1	45.4	13.4	10.8	13.8
Derivatives	113.0	119.9	145.4	135.1	157.8	113.7	145.4	156.3
Other	1.6	2.8	3.9	4.2	2.4	3.5	3.9	3.9
Doubtful assets and matured investment	4.9	7.9	5.5	6.9	6.3	5.9	5.5	6.0
Intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net fixed assets	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1
Cash	976.4	832.0	854.6	1,014.6	946.9	951.4	854.6	1,071.1
Net balance (Debtors - Creditors)	134.8	135.5	237.4	214.6	233.0	364.6	237.4	218.8

1 Provisional data.

Financial mutual funds: number, investors and total net assets by category[1]

TABLE 3.6

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[2]
NUMBER OF FUNDS								
Total financial mutual funds	2,536	2,408	2,310	2,389	2,341	2,310	2,300	2,280
Fixed-income[3]	582	537	508	530	520	508	491	490
Mixed fixed-income[4]	169	160	140	152	146	140	140	133
Mixed equity[5]	165	138	128	132	130	128	130	127
Euro equity[6]	182	172	148	157	153	148	143	140
Foreign equity[7]	242	232	220	222	222	220	222	221
Guaranteed fixed-income	233	276	351	324	335	351	375	376
Guaranteed equity[8]	561	499	420	470	436	420	404	397
Global funds	187	192	203	203	204	203	200	200
Passive management[9]	69	61	59	57	59	59	64	67
Absolute return[9]	146	141	133	142	136	133	131	129
INVESTORS								
Total financial mutual funds	5,475,403	5,160,889	4,835,193	5,044,106	4,942,074	4,835,193	4,759,241	4,728,102
Fixed-income[3]	2,041,487	1,622,664	1,384,946	1,466,938	1,419,006	1,384,946	1,362,441	1,360,173
Mixed fixed-income[4]	290,151	270,341	206,938	238,275	227,046	206,938	204,653	203,515
Mixed equity[5]	182,542	171,336	145,150	156,631	151,551	145,150	145,472	144,483
Euro equity[6]	299,353	266,395	237,815	248,355	247,166	237,815	224,886	225,945
Foreign equity[7]	458,097	501,138	448,539	493,057	465,814	448,539	442,753	438,086
Guaranteed fixed-income	570,963	790,081	1,042,658	990,997	1,019,905	1,042,658	1,071,544	1,068,644
Guaranteed equity[8]	1,188,304	1,065,426	912,298	981,572	946,448	912,298	874,249	857,997
Global funds	88,337	105,720	127,336	124,088	130,519	127,336	113,396	112,072
Passive management[9]	85,403	90,343	100,416	82,371	95,948	100,416	101,901	103,149
Absolute return[9]	270,766	277,445	229,097	261,822	238,671	229,097	217,946	214,038
TOTAL NET ASSETS (million euros)								
Total financial mutual funds	170,547.7	143,918.2	132,368.6	140,351.3	134,033.7	132,368.6	131,994.5	129,843.6
Fixed-income[3]	84,657.2	56,614.6	46,945.5	49,449.9	48,228.6	46,945.5	45,101.8	44,957.5
Mixed fixed-income[4]	8,695.5	7,319.0	5,253.6	6,251.9	5,715.8	5,253.6	5,686.9	5,613.1
Mixed equity[5]	3,879.6	3,470.5	2,906.1	3,345.6	2,897.5	2,906.1	3,234.2	3,113.5
Euro equity[6]	6,321.6	5,356.8	4,829.2	5,687.2	4,610.8	4,829.2	4,815.6	4,557.3
Foreign equity[7]	5,902.4	8,037.3	6,281.2	7,751.6	6,028.4	6,281.2	6,813.2	6,658.5
Guaranteed fixed-income	21,033.4	26,180.2	35,058.0	32,742.1	34,241.7	35,058.0	36,677.0	36,162.7
Guaranteed equity[8]	25,665.8	22,046.5	18,014.5	19,827.6	18,699.9	18,014.5	17,408.5	16,850.6
Global funds	3,872.5	4,440.3	5,104.7	5,718.1	5,154.3	5,104.7	4,545.5	4,510.5
Passive management[9]	3,216.6	2,104.8	1,986.2	2,172.2	2,060.0	1,986.2	2,053.9	1,953.5
Absolute return[9]	7,303.0	8,348.1	5,989.7	7,405.1	6,396.8	5,989.7	5,657.8	5,466.4

1 Mutual funds which have sent reports to the CNMV, excluding those in process of dissolution or liquidation.
2 Available data: April 2012.
3 Until I 2009 this category includes: Short-term fixed income, Long-term fixed income, Foreign fixed-income and Monetary market funds. From II 2009 on includes: Fixed income euro, Foreign fixed-income and Monetary market funds. From III 2011 on includes: Fixed income euro, Foreign fixed-income, Monetary market funds and Short-term monetary market funds. To December 2006 included: FIAMM (Mutual funds in monetary market assets).
4 Until I 2009 this category includes: Mixed fixed-income and Foreign mixed fixed-income. From II 2009 on includes: Mixed euro fixed-income and Foreign mixed fixed-income.
5 Until I 2009 this category includes: Mixed equity and Foreign mixed equity. From II 2009 on includes: Mixed euro equity and Foreign mixed equity.
6 Until I 2009 this category includes: Spanish equity and Euro Equity. From II 2009 on includes: Euro equity (which includes domestic equity).
7 Until I 2009 this category includes: Foreign equity Europe, Foreign equity Japan, Foreign equity US, Foreign equity emerging countries and Other foreign equity. From II 2009 on includes: Foreign equity.
8 Until I 2009 this category includes: Guaranteed equity. From II 2009 on includes: Guaranteed equity and partial guarantee.
9 New categories from II 2009 on. Before it, absolute return funds were classified as global Funds.

Financial mutual funds: Detail of investors and total net assets by type of investors

TABLE 3.7

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[1]
INVESTORS								
Total financial mutual funds	5,475,403	5,160,889	4,835,193	5,044,106	4,942,074	4,835,193	4,759,241	4,728,102
Individuals	5,322,214	5,019,902	4,706,193	4,907,283	4,808,616	4,706,193	4,632,865	4,600,800
Residents	5,252,126	4,954,891	4,645,384	4,843,565	4,746,165	4,645,384	4,572,785	4,541,367
Non-residents	70,088	65,011	60,809	63,718	62,451	60,809	60,080	59,433
Legal entities	153,189	140,987	129,000	136,823	133,458	129,000	126,376	127,302
Credit Institutions	674	524	490	491	507	490	502	486
Other resident Institutions	151,479	139,550	127,765	135,505	132,160	127,765	125,168	126,114
Non-resident Institutions	1,036	913	745	827	791	745	706	702
TOTAL NET ASSETS (million euros)								
Total financial mutual funds	170,547.7	143,918.1	132,368.6	140,351.3	134,033.7	132,368.6	131,994.5	129,843.6
Individuals	132,860.5	113,660.6	106,561.9	111,732.9	108,000.6	106,561.9	108,015.5	106,195.9
Residents	130,954.4	111,900.1	105,023.5	110,123.1	106,440.9	105,023.5	106,439.1	104,660.2
Non-residents	1,906.0	1,760.5	1,538.5	1,609.9	1,559.7	1,538.5	1,576.3	1,535.7
Legal entities	37,687.2	30,257.5	25,806.7	28,618.3	26,033.1	25,806.7	23,979.1	23,647.8
Credit Institutions	2,572.0	1,926.1	1,446.7	1,854.3	1,477.0	1,446.7	1,373.5	1,344.2
Other resident Institutions	34,065.1	27,644.6	23,946.3	26,205.8	24,107.8	23,946.3	22,223.1	21,936.2
Non-resident Institutions	1,050.1	686.9	413.7	558.3	448.3	413.7	382.5	367.3

1 Available data: April 2012.

Subscriptions and redemptions of financial mutual funds by category[1]

TABLE 3.8

Million euros	2009[2]	2010	2011	2011 I	2011 II	2011 III	2011 IV	2012 I
SUBSCRIPTIONS								
Total financial mutual funds	109,915.2	78,805.2	58,145.0	22,756.0	13,163.9	10,993.2	11,231.9	14,986.1
Fixed-income	73,718.8	41,656.1	27,206.2	7,890.1	6,478.3	5,962.8	6,875.0	9,522.4
Mixed fixed-income	5,267.6	3,538.8	1,332.4	358.0	517.7	232.0	224.7	386.1
Mixed equity	1,135.4	1,221.7	815.7	270.4	334.7	44.6	166.0	121.6
Euro equity	2,183.8	1,673.0	2,085.0	575.2	524.1	472.1	513.6	292.1
Foreign equity	2,929.5	4,455.2	3,835.1	2,488.7	721.4	321.2	303.8	595.4
Guaranteed fixed-income	11,755.4	11,513.4	13,965.7	7,424.2	2,595.3	2,202.5	1,743.7	2,340.3
Guaranteed equity	5,589.1	5,120.1	2,570.7	828.6	622.0	751.4	368.7	683.0
Global funds	2,754.4	3,018.1	3,261.6	1,534.3	838.6	572.2	316.5	477.5
Passive management	535.5	683.8	924.7	220.5	149.2	197.1	357.9	249.6
Absolute return	4,045.7	5,924.8	2,147.7	1,165.9	382.4	237.4	362.0	318.1
REDEMPTIONS								
Total financial mutual funds	122,617.5	104,385.6	68,983.6	23,528.9	17,258.8	13,676.7	14,519.2	16,923.3
Fixed-income	81,197.6	68,806.1	37,633.9	13,298.5	8,737.2	7,192.5	8,405.7	10,907.6
Mixed fixed-income	2,724.4	4,955.7	3,258.1	1,138.4	892.5	552.8	674.4	586.8
Mixed equity	1,596.5	1,311.8	1,136.2	267.4	435.3	192.7	240.8	235.5
Euro equity	2,457.8	2,369.9	1,933.0	594.8	453.7	418.8	465.7	420.9
Foreign equity	2,165.3	3,303.3	4,652.7	2,521.1	800.6	841.9	489.1	549.8
Guaranteed fixed-income	15,004.5	6,797.4	6,737.4	2,007.8	2,223.6	1,155.6	1,350.4	1,756.2
Guaranteed equity	10,990.8	7,620.2	5,632.3	1,624.7	1,717.3	1,356.3	934.0	1,202.3
Global funds	2,548.6	2,694.4	2,316.3	507.0	601.0	631.4	576.9	298.2
Passive management	708.0	1,474.1	1,199.2	236.7	108.3	301.1	553.1	220.3
Absolute return	3,224.0	5,053.0	4,484.7	1,332.4	1,289.5	1,033.6	829.2	745.8

1 Estimated data.
2 For passive management and absolute return, data refers to the last three quarters of the year.

Financial mutual funds asset change by category: Net subscriptions/redemptions and return on assets

TABLE 3.9

Million euros	2009[1]	2010	2011	2011 I	2011 II	2011 III	2011 IV	2012 I
NET SUBSCRIPTIONS/REDEMPTIONS								
Total financial mutual funds	-12,702.3	-25,580.6	-10,853.1	-765.2	-4,121.9	-2,683.0	-3,283.0	-3,427.2
Fixed-income	-7,478.8	-27,149.9	-10,423.6	-5,392.3	-2,280.5	-1,211.6	-1,539.2	-2,496.7
Mixed fixed-income	2,543.2	-1,417.0	-1,980.4	-814.4	-323.8	-320.6	-521.6	302.2
Mixed equity	-461.1	-90.0	-375.5	-61.2	-128.4	-112.0	-73.9	219.8
Euro equity	-274.0	-696.9	142.0	-19.6	59.0	52.9	49.7	-171.8
Foreign equity	764.2	1,152.1	-796.0	-48.8	-45.7	-516.4	-185.1	-17.2
Guaranteed fixed-income	-3,249.1	4,716.0	7,809.3	5,631.1	531.1	1,077.6	569.5	748.4
Guaranteed equity	-5,401.7	-2,500.1	-4,053.9	-1,016.9	-1,288.1	-963.7	-785.2	-896.4
Global funds	205.8	323.6	972.2	997.6	247.1	-84.7	-187.8	-710.2
Passive management	-172.5	-790.3	60.8	11.9	-10.8	206.6	-146.9	25.0
Absolute return	821.7	871.7	-2,207.9	-52.6	-881.9	-810.9	-462.5	-430.2
RETURN ON ASSETS								
Total financial mutual funds	8,389.8	135.7	-673.3	1,280.8	47.2	-3,623.9	1,622.6	3,053.1
Fixed-income	1,535.3	64.5	744.9	330.6	164.9	-9.4	258.8	653.0
Mixed fixed-income	507.9	-56.4	-85.1	65.4	5.6	-215.5	59.4	131.1
Mixed equity	529.9	-53.4	-189.0	75.2	-10.5	-336.2	82.5	108.3
Euro equity	1,477.1	-254.1	-666.9	319.2	-26.9	-1,129.3	170.1	158.2
Foreign equity	1,309.0	877.4	-947.2	-79.5	-98.8	-1,206.8	437.9	549.2
Guaranteed fixed-income	830.5	-170.4	1,070.4	273.0	127.2	422.7	247.5	870.5
Guaranteed equity	1,024.0	-392.8	21.8	151.9	-65.8	-164.0	99.7	290.5
Global funds	272.2	123.1	-307.8	43.8	-10.7	-479.1	138.2	151.1
Passive management	657.8	-109.7	-163.9	81.9	-9.9	-309.0	73.1	42.7
Absolute return	246.4	107.7	-150.5	19.3	-27.9	-197.3	55.4	98.4

1 The data refers to the last three quarters of the year for passive management and absolute return categories.

Financial mutual funds return on assets. Detail by category

TABLE 3.10

% of daily average total net assets	2009[1]	2010	2011	2011 I	2011 II	2011 III	2011 IV	2012 I
MANAGEMENT YIELDS								
Total financial mutual funds	6.13	1.09	0.45	1.13	0.27	-2.45	1.47	2.56
Fixed-income	2.69	0.78	2.28	0.80	0.51	0.14	0.74	1.65
Mixed fixed-income	9.34	0.61	-0.15	1.25	0.41	-3.33	1.41	2.59
Mixed equity	16.44	0.11	-4.30	2.59	0.16	-10.57	3.28	3.71
Euro equity	31.02	-3.05	-10.77	6.24	0.15	-22.40	4.07	3.70
Foreign equity	33.16	14.80	-11.05	-0.48	-0.68	-17.26	7.55	8.70
Guaranteed fixed-income	4.10	-0.11	3.77	1.01	0.44	1.44	0.85	2.51
Guaranteed equity	5.08	-0.46	1.29	1.02	0.01	-0.54	0.87	1.97
Global funds	10.82	4.15	-4.55	1.20	0.13	-8.51	2.97	3.79
Passive management	–	-2.50	-6.27	3.96	-0.21	-13.81	3.98	2.38
Absolute return	–	2.49	-0.90	0.54	-0.07	-2.60	1.20	1.99
EXPENSES. MANAGEMENT FEE								
Total financial mutual funds	0.87	0.91	0.93	0.23	0.23	0.23	0.24	0.24
Fixed-income	0.63	0.65	0.64	0.16	0.16	0.16	0.16	0.17
Mixed fixed-income	1.14	1.20	1.17	0.29	0.29	0.28	0.30	0.29
Mixed equity	1.58	1.65	1.59	0.40	0.39	0.39	0.40	0.39
Euro equity	1.75	1.78	1.80	0.44	0.44	0.46	0.45	0.44
Foreign equity	1.79	1.84	1.77	0.44	0.43	0.44	0.45	0.47
Guaranteed fixed-income	0.65	0.62	0.72	0.16	0.18	0.19	0.19	0.19
Guaranteed equity	1.26	1.24	1.24	0.30	0.30	0.32	0.31	0.30
Global funds	1.08	1.06	1.11	0.29	0.27	0.27	0.28	0.33
Passive management	–	0.72	0.75	0.19	0.18	0.17	0.21	0.22
Absolute return	–	1.06	1.08	0.29	0.26	0.25	0.28	0.30
EXPENSES. DEPOSITORY FEE								
Total financial mutual funds	0.09	0.09	0.08	0.02	0.02	0.02	0.02	0.02
Fixed-income	0.08	0.08	0.08	0.02	0.02	0.02	0.02	0.02
Mixed fixed-income	0.09	0.10	0.12	0.03	0.03	0.03	0.03	0.02
Mixed equity	0.10	0.12	0.12	0.03	0.03	0.03	0.03	0.03
Euro equity	0.10	0.11	0.12	0.03	0.03	0.03	0.03	0.03
Foreign equity	0.12	0.12	0.12	0.03	0.03	0.03	0.03	0.03
Guaranteed fixed-income	0.08	0.07	0.08	0.02	0.02	0.02	0.02	0.02
Guaranteed equity	0.11	0.10	0.08	0.02	0.02	0.02	0.02	0.02
Global funds	0.08	0.09	0.08	0.02	0.02	0.02	0.02	0.02
Passive management	–	0.07	0.08	0.02	0.02	0.02	0.02	0.02
Absolute return	–	0.08	0.08	0.02	0.02	0.02	0.02	0.02

1 Does not include the annual yield of passive management and absolute return funds as these categories entered into force with Circular 1/2009 from the second quarter of 2009.

Mutual funds quarterly returns. Detail by category

TABLE 3.11

In %	2009[1]	2010	2011	2011 I	2011 II	2011 III	2011 IV	2012 I
Total financial mutual funds	5.73	0.35	-0.08	0.95	0.03	-2.37	1.35	2.41
Fixed-income	1.91	0.11	1.56	0.63	0.33	0.01	0.58	1.51
Mixed fixed-income	6.85	-0.54	-1.34	0.90	0.09	-3.47	1.20	2.30
Mixed equity	16.47	-0.98	-5.64	2.23	-0.31	-10.13	3.02	3.25
Euro equity	32.41	-2.94	-11.71	6.11	-0.45	-19.67	4.05	3.34
Foreign equity	37.28	14.22	-10.83	-0.49	-1.15	-15.70	7.53	8.91
Guaranteed fixed-income	3.81	-0.67	3.28	0.89	0.36	1.28	0.71	2.48
Guaranteed equity	3.56	-1.79	0.14	0.71	-0.48	-0.76	0.68	1.63
Global funds	10.90	3.22	-4.64	0.98	-0.14	-8.10	2.90	3.56
Passive management	–	-2.36	-7.33	3.74	-0.30	-13.94	4.11	1.97
Absolute return	–	1.53	-1.87	0.28	-0.35	-2.71	0.93	1.68

1 Does not include the annual yield of passive management and absolute return funds as these categories entered into force with Circular 1/2009 from the second quarter of 2009.

Hedge funds and funds of hedge funds

TABLE 3.12

	2009	2010	2011	2011 I	2011 II	2011 III	2011 IV	2012 I[1]
HEDGE FUNDS								
Investors/shareholders	1,917	1,852	2,047	1,958	2,022	2,057	2,047	1,970
Total net assets (million euros)	652.0	646.2	728.1	693.5	738.9	703.9	728.1	734.7
Subscriptions (million euros)	248.7	236.6	201.1	56.0	58.5	36.1	50.5	17.4
Redemptions (million euros)	198.3	268.6	92.5	20.2	16.0	17.3	39.0	40.2
Net subscriptions/redemptions (million euros)	50.4	-32.0	108.6	35.8	42.5	18.8	11.5	-22.8
Return on assets (million euros)	62.2	26.3	-26.5	11.5	3.0	-53.8	12.8	29.5
Returns (%)	14.94	5.37	-2.60	1.79	0.51	-6.81	2.16	4.15
Management yields (%)[2]	13.76	6.33	-1.88	2.38	0.92	-7.04	2.16	4.11
Management fee (%)[2]	2.55	1.91	1.66	0.48	0.41	0.38	0.38	0.25
Financial expenses (%)[2]	0.11	0.07	0.06	0.02	0.02	0.01	0.01	0.01
FUNDS OF HEDGE FUNDS								
Investors/shareholders	5,321	4,404	3,805	4,240	4,137	4,046	3,805	3,656
Total net assets (million euros)	810.2	694.9	573.0	667.2	636.1	617.4	573.0	573.1
Subscriptions (million euros)	302.4	47.9	10.6	2.3	4.2	1.9	2.2	–
Redemptions (million euros)	585.4	184.8	120.1	29.9	28.4	10.7	51.1	–
Net subscriptions/redemptions (million euros)	-283.0	-136.9	-109.6	-27.6	-24.3	-8.8	-48.9	–
Return on assets (million euros)	71.9	21.7	-12.3	-0.1	-6.8	-9.9	4.5	–
Returns (%)	7.85	3.15	-1.70	-0.01	-1.03	-1.50	0.85	1.22
Management yields (%)[3]	11.54	4.38	-0.47	0.36	-0.69	-1.21	1.09	–
Management fee (%)[3]	1.34	1.25	1.25	0.31	0.32	0.30	0.31	–
Depository fee (%)[3]	0.11	0.08	0.08	0.02	0.02	0.02	0.02	–

1 Available data: February 2012. Return refers to the period December-February.
2 Percentage of monthly average total net assets.
3 Percentage of daily average total net assets.

Management companies. Number of portfolios and assets under management[1]

TABLE 3.13

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[2]
NUMBER OF PORTFOLIOS								
Mutual funds	2,593	2,429	2,341	2,410	2,356	2,341	2,306	2,304
Investment companies	3,135	3,068	3,002	3,024	3,015	3,002	2,975	2,975
Funds of hedge funds	38	32	27	28	28	27	27	27
Hedge funds	28	31	35	35	36	35	35	35
Real estate investment fund	8	8	6	8	6	6	6	6
Real estate investment companies	8	8	8	8	9	8	8	8
ASSETS UNDER MANAGEMENT (million euros)								
Mutual funds	170,547.7	143,918.2	132,368.6	140,351.3	134,033.7	132,368.6	131,994.5	129,843.6
Investment companies	24,952.8	25,361.3	23,037.8	25,399.1	23,321.3	23,037.8	23,827.4	23,279.4
Funds of hedge funds[3]	810.2	694.9	573.0	636.1	617.4	573.0	573.1	–
Hedge funds[3]	652.0	643.5	694.7	710.4	673.0	694.7	699.8	–
Real estate investment fund	6,465.1	6,115.6	4,494.6	5,995.5	4,597.3	4,494.6	4,446.9	4,434.0
Real estate investment companies	308.5	321.9	312.5	318.2	1,663.4	312.5	310.8	314.3

1 As from the second quarter of 2009, 100% of the assets of SICAV (investment companies) managed by CIS management companies and other different companies are considered as assets under management by CIS management companies.
2 Available data: April 2012.
3 Available data for the first quarter of 2012: February 2012.

Foreign collective investment schemes marketed in Spain[1]

TABLE 3.14

	2009	2010	2011	2011 I	2011 II	2011 III	2011 IV	2012 I[2]
INVESTMENT VOLUME[3] (million euros)								
Total	25,207.2	36,692.9	29,969.5	37,639.1	35,582.2	30,967.3	29,969.5	31,835.1
Mutual funds	5,215.1	8,535.9	6,382.9	8,092.4	7,303.2	6,446.0	6,382.9	6,583.3
Investment companies	19,992.0	28,156.9	23,586.6	29,546.6	28,279.0	24,521.3	23,586.6	25,251.9
NUMBER OF INVESTORS								
Total	685,094	865,767	761,380	855,929	856,882	803,801	761,380	768,467
Mutual funds	139,102	193,233	177,832	197,965	195,525	185,665	177,832	175,621
Investment companies	545,992	666,534	583,548	657,964	661,357	618,136	583,548	592,846
NUMBER OF SCHEMES								
Total	582	660	739	669	695	695	739	765
Mutual funds	324	379	426	383	395	395	426	443
Investment companies	258	281	313	286	300	300	313	322
HOME COUNTRY								
Luxembourg	275	290	297	292	298	298	297	303
France	178	225	284	229	239	241	284	300
Ireland	64	75	87	77	84	82	87	90
Germany	17	20	20	20	21	21	20	20
United Kingdom	14	16	19	17	19	19	19	20
Netherlands	1	1	1	1	1	1	1	1
Austria	27	27	25	27	27	27	25	25
Belgium	5	5	5	5	5	5	5	5
Malta	1	1	1	1	1	1	1	1

1 Exchange traded funds (ETFs) data is not included.
2 Provisional data.
3 Investment volume: calculated by multiplying the number of shares or units held by investors at the end of the period by their value in euros on said date.

Key figures of real estate CIS[1]

TABLE 3.15

	2009	2010	2011	2011 II	2011 III	2011 IV	2012 I	2012 II[2]
REAL ESTATE MUTUAL FUNDS								
Number	8	7	6	7	6	6	6	6
Investors	83,583	75,280	29,735	31,963	31,412	29,735	29,754	30,169
Assets (million euros)	6,465.1	6,115.6	4,494.6	5,995.5	4,597.3	4,494.6	4,446.9	4,434.0
Return on assets (%)	-8.31	-4.74	-3.23	-0.65	-1.03	-0.93	-0.86	-0.36
REAL ESTATE INVESTMENT COMPANIES								
Number	8	8	8	8	9	8	8	8
Shareholders	928	943	943	943	944	943	939	939
Assets (million euros)	308.6	321.9	312.5	318.2	1,663.4	312.5	310.8	314.3

1 Real estate CIS which have sent reports to the CNMV, excluding those in process of dissolution or liquidation.
2 Available data: April 2012. In this case, return on assets is monthly.