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I Market survey ..... 9
II Reports and Analyses ..... 41
Economic and financial performance of listed companies ..... 43
in the first half of 2011
Carolina Moral and Javier Domínguez
Exchange-traded funds: features and recent developments ..... 63
Carlos Aparicio Roqueiro and Fco. Javier González Pueyo
Financial education and its importance in economic decisions: ..... 79
evidence and initiatives
Anna Ispierto Maté and Isabel Oliver Yébenes
III Regulatory Novelties ..... 95
The reform of the Spanish clearing, settlement and registry system ..... 97
Matías Nuño Cervero, Raúl Navarro Lozano and Bárbara Gullón Ojesto
Amendments to Law 35/2003 on Collective Investment Schemes ..... 121
Adela Aguilar, Silvia García, María Dolores García, Jorge Medina and Marta Peláez
IV Legislative Annex ..... 135
V Statistics Annex ..... 147

## 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 |
| :---: | :---: |
| 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 Capi tales 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 ma nagement company) |
| SGFT | Sociedad gestora de fondos de titulización (asset securitisation trust ma nagement 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

In recent months, the world economy has been confronted by a growth stall extending even to the emerging countries. And to judge from the latest forecasts by leading international organisations, the slowdown will persist in the near-term future. In this scenario of weakening activity and more muted inflation, most economic regions stuck to a firmly expansionary monetary policy, and some central banks even lowered their key rates. Meantime the tensions caused by the European sovereign debt crisis flared up once more on international markets before receding somewhat in the closing days. ${ }^{1}$

International equity markets, which had begun the year with a solid rally, in tune with more upbeat expectations for world economic growth, turned down progressively as the months advanced, leaving most major indices with year-long losses deeper than $14 \%$. Stock price volatility rose some way past $30 \%$, depending on the index, which is higher than historical averages but short of the levels reached during earlier debt crisis episodes. Bank sector shares were especially hard hit by the waves of turbulence, especially in Europe.

In debt markets, long-term yields of the U.S., UK and German bonds prolonged their fall to close the year near $2 \%$, while, elsewhere, more and more countries faced a run-up in rates. Indeed one of the salient features of the latest round of the European sovereign debt crisis was the spreading of tensions to economies that had thus far escaped more or less unscathed. Over full-year 2011, international debt issuance tailed off sharply with a predominance of government paper.

In currency markets, the euro traced an irregular descent against other leading currencies over the year's second half, due to the instability generated by the prolonged debt crisis in the zone. Specifically, euro exchange rates against the U.S. and Japanese currencies depreciated $10 \%$ and $14 \%$ respectively from mid-year levels to around 1.30 dollars and 100 yens.

In Spain, data for the third quarter of 2011 confirmed the slowdown in the national economy, with a zero advance in GDP contrasting with the $0.4 \%$ and $0.2 \%$ of the first and second quarter respectively. The result was a year-on-year growth rate of $0.8 \%$ over the first nine months of 2011 , on the strength, primarily, of the foreign sector. The euro area performed rather better with $0.2 \%$ growth in the third quarter ( $1.4 \%$ year-on-year), though here too activity weakened as the year progressed. Spain's inflation, meantime, eased from an April high of $3.8 \%$ to $2.4 \%$ in the month of December, ${ }^{2}$ while underlying rates held more or less flat in the region of $1.6 \%$.

[^0]|  | Q1 11 | Q2 11 | Q3 11 | Q4 11 |
| :--- | :---: | :---: | :---: | ---: |
| Short-term interest rates (\%) ${ }^{\mathbf{1}}$ |  |  |  |  |
| Official interest rate | 1.00 | 1.25 | 1.50 | 1.00 |
| Euribor 3 month | 1.18 | 1.49 | 1.54 | 1.43 |
| Euribor 12 month | 1.92 | 2.14 | 2.07 | 2.00 |
| Exchange rates $^{2}$ |  |  |  |  |
| Dollar/euro | 117.42 | 1.45 | 1.35 | 1.29 |
| Yen/euro | 116.3 | 103.8 | 100.2 |  |
| Medium and long government bond yields ${ }^{\mathbf{3}}$ |  |  |  |  |
| Euro area |  |  |  |  |
| 3 year | 1.82 | 1.69 | 0.51 | 0.41 |
| 5 year | 2.53 | 2.20 | 1.00 | 0.92 |
| 10 year | 3.24 | 2.98 | 1.87 | 1.99 |
| United States |  |  |  |  |
| 3 year | 1.15 | 0.70 | 0.35 | 0.38 |
| 5 year | 2.10 | 1.57 | 0.89 | 0.88 |
| 10 year | 3.41 | 2.99 | 1.96 | 1.97 |

Credit risk premiums: BBB-AAA spread (basis points) ${ }^{3}$

| Euro area |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| High yield | 388 | 413 | 703 | 739 |
| BBB | 151 | 152 | 291 | 287 |
| AAA | 23 | 5 | -12 | -22 |
| United States |  |  |  |  |
| High yield | 400 | 457 | 692 | 683 |
| BBB | 122 | 134 | 240 | 261 |
| AAA | 46 | 49 | 79 | 98 |
| Equity markets |  |  |  |  |
| Performance of main world stock indices (\%) ${ }^{4}$ |  |  |  |  |
| Euro Stoxx 50 | 4.2 | -2.1 | -23.5 | 6.3 |
| Dow Jones | 6.4 | 0.8 | -12.1 | 12.0 |
| Nikkei | -4.6 | 0.6 | -11.4 | -2.8 |
| Other indices (\%) |  |  |  |  |
| Merval (Argentina) | -3.8 | -0.8 | -26.7 | 0.0 |
| Bovespa (Brazil) | -1.0 | -9.0 | -16.2 | 8.5 |
| Shanghai Comp (China) | 4.3 | -5.7 | -14.6 | -6.8 |
| BSE (India) | -5.4 | -2.9 | -12.1 | -8.0 |
| Spanish stock market |  |  |  |  |
| Ibex 35 (\%) | 7.3 | -2.0 | -17.5 | 0.2 |
| P/E of Ibex $35^{5}$ | 10.4 | 9.8 | 8.3 | 9.1 |
| Volatility of Ibex $35(\%)^{6}$ | 26.8 | 21.9 | 41.2 | 36.2 |
| SIBE trading volumes ${ }^{7}$ | 3,844 | 3,821 | 3,531 | 3,202 |

Source: CNMV, Thomson Datastream, Bloomberg, Reuters, Bank of Spain, Bolsa de Madrid, MEFF and AIAF.
1 Monthly average of daily data. The official interest rate corresponds to the marginal rate at weekly auctions at the period close.

2 Data at period end. Data for the fourth quarter of 2011 correspond to 30 December.
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 of the quarter.
7 Daily average in million euros.

Budget execution data point to the upkeep of the fiscal consolidation initiated in 2010, albeit with divergences between levels of government.

Domestic fixed-income markets continued labouring under the strain of the latest debt crisis episode in the second half of 2011 . Perceptions of Spanish sovereign risk turned sharply for the worse in mid-year 2011, after earlier improvement, and remained that way until the closing weeks, when the picture appeared to brighten. During this phase, the ten-year yield spread over German bonds dropped from around 470 basis points (bp) at end-November to 350 bp at end-December. In this difficult second-half context, corporate issuers chose to reduce their reliance on less collateralised bonds. Overall, however, the volume of fixed-income issues registered with the CNMV rose by $27.8 \%$ in full-year 2011 as far as 289 billion euros. Driving the advance was increased issuance of covered mortgage and territorial bonds and, to a smaller extent, asset-backed securities and commercial paper.

Spanish stocks were also caught up in the volatility surge that swept international markets in the second half of 2011 . For the Ibex 35, the result was a third-quarter slump of $17.5 \%$ followed by a bare $0.2 \%$ advance in the closing quarter, rounding off a full-year decline of $13.1 \%(-17.4 \%$ in 2010). The implied volatility of the Spanish market was lower in the fourth quarter than in the third, when it came close to recouping the highs of the second quarter of 2010, coinciding with the first round of the Greek sovereign debt crisis. Meantime market liquidity shrank to the levels of the first quarter of 2009. These adverse conditions caused equity issuance to grind to a halt from August onwards, though full-year volumes were $2.7 \%$ higher than in 2010. Market turnover also suffered in comparison with the first-half period and the strong advance of the previous year.

## 2 International financial background

### 2.1 Short-term interest rates

As we can see from figure 1 , the interbank rates of leading advanced economies closed 2011 at historic lows. This despite a muted advance over the course of the year with the exception of Japan. In the United States and United Kingdom, short-term rates held more or less flat in the first-half period then pulled moderately higher in the closing months (see table 2). Conversely, euro interbank rates rose more intensely in the first six months - by 47 bp and 62 bp at three and twelve months respectively - ahead of the expected shift in ECB monetary policy. Finally the bank implemented two 25 bp hikes, in April and June, that left its key rate at $1.5 \%$. In the last few months, however, it switched stance once more in view of lessening inflation pressures and the relapse in economic activity, and cut rates twice as far as $1 \%$ at the 2011 close. 3

[^1]

Source: Thomson Datastream.

Meantime, spreads between deposit and repo rates in U.S. and euro interbank markets widened as of April, more intensely on the side of Europe (see figure 2, left--hand panel). At nearly 120 bp in the three-month maturity, this spread was higher than at any time since December 2008, though without scaling the heights reached after the Lehman Brothers collapse ( 182 bp ).

Interbank spreads and Eurosystem financing


Source: Thomson Datastream and ECB. Spread data to 15 December. Eurosystem data correspond to fourweek moving averages based on weekly information from institutions' consolidated financial statements, the last figure available being for 23 December.

National Bank, the Bank of Japan and the Bank of Canada to provide liquidity in any of their currencies if market conditions so warrant. Individually, the Bank of England decided last October to expand its gilt--buying programme by 75 billion pounds as far as 275 billion pounds, while the Bank of Japan, that same month, increased its asset acquisition programme from 15 to 20 trillion yens. Finally, the U.S. Federal Reserve announced in September that it would keep up its maturity extension programme and its policy of reinvesting principal payments on its Treasury and agency instruments in agency mortgage-backed securities.

Euro-area financial institutions continued to reduce their net borrowing from the Eurosystem to just over 300 billion euros in early December - closer to the 2004 figure than the highs reached in 2009 (over 600 billion euros). Despite this, the ECB went ahead in late December with its first tender of three-year loans, which ended with banks borrowing 489 billion euros. Recourse to the deposit facility was stepped up in the period, with over 340 billion euros held at end-December, lifting the ECB's net lending to Eurosystem institutions to 450 billion euros on 30 December (see the four-week moving averages for these two variables in the right-hand panel of figure 2).

Short-term interest rates ${ }^{1}$ (\%) TABLE 2

|  | Dec 07 | Dec 08 | Dec 09 | Dec 10 | Mar 11 | Jun 11 | Sep 11 | Dec 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Euro area |  |  |  |  |  |  |  |  |
| Official ${ }^{2}$ | 4.00 | 2.50 | 1.00 | 1.00 | 1.00 | 1.25 | 1.50 | 1.00 |
| 3 month | 4.84 | 3.27 | 0.71 | 1.02 | 1.18 | 1.49 | 1.54 | 1.43 |
| 6 month | 4.81 | 3.34 | 1.00 | 1.25 | 1.48 | 1.75 | 1.74 | 1.67 |
| 12 month | 4.79 | 3.43 | 1.24 | 1.53 | 1.92 | 2.14 | 2.07 | 2.00 |
| United States |  |  |  |  |  |  |  |  |
| Official ${ }^{3}$ | 4.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| 3 month | 4.97 | 1.80 | 0.25 | 0.30 | 0.31 | 0.25 | 0.35 | 0.56 |
| 6 month | 4.82 | 2.15 | 0.45 | 0.46 | 0.46 | 0.40 | 0.52 | 0.78 |
| 12 month | 4.42 | 2.36 | 1.00 | 0.78 | 0.78 | 0.73 | 0.83 | 1.10 |
| United Kingdom |  |  |  |  |  |  |  |  |
| Official | 5.00 | 2.00 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| 3 month | 5.26 | 2.99 | 0.65 | 0.80 | 0.83 | 0.83 | 0.95 | 1.05 |
| 6 month | 5.34 | 3.12 | 0.95 | 1.05 | 1.15 | 1.13 | 1.20 | 1.40 |
| 12 month | 5.47 | 3.25 | 1.45 | 1.50 | 1.62 | 1.60 | 1.70 | 1.90 |
| Japan |  |  |  |  |  |  |  |  |
| Official ${ }^{4}$ | 0.50 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| 3 month | 0.98 | 0.91 | 0.28 | 0.18 | 0.20 | 0.20 | 0.19 | 0.20 |
| 6 month | 1.03 | 1.01 | 0.48 | 0.35 | 0.35 | 0.34 | 0.33 | 0.34 |
| 12 month | 1.10 | 1.12 | 0.70 | 0.57 | 0.57 | 0.56 | 0.55 | 0.55 |

Source: Thomson Datastream.
1 Average daily data except official rates, which correspond to the last day of the period.
2 Marginal rate at weekly auctions.
3 Federal funds rate.
4 Monetary policy rate.

By mid-December 2011, expectations for short-term interest rates were pricing in a 25 bp cut in the euro area during the first three months of 2012 and no change in the United States. On a one-year horizon, forward rates were signalling a continuation of the downtrend in euro-area rates and a gentle increase stateside (see table 3).

|  | Dec 07 | Dec 08 | Dec 09 | Dec 10 | Mar 11 | Jun 11 | Sep 11 | Dec 11 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Euro area |  |  |  |  |  |  |  |  |
| Spot | 4.68 | 2.89 | 0.70 | 1.01 | 1.24 | 1.55 | 1.55 | 1.36 |
| FRA 3x6 | 4.52 | 2.17 | 0.82 | 1.04 | 1.58 | 1.76 | 1.23 | 1.06 |
| FRA 6x9 | 4.42 | 1.97 | 1.21 | 1.13 | 1.88 | 1.88 | 1.15 | 0.93 |
| FRA 9×12 | 4.33 | 2.13 | 1.61 | 1.23 | 2.12 | 1.98 | 1.10 | 0.90 |
| FRA 12x15 | 4.30 | 2.22 | 1.90 | 1.34 | 2.35 | 2.05 | 1.10 | 0.91 |
| United States |  |  |  |  |  |  |  |  |
| Spot | 4.70 | 1.43 | 0.25 | 0.30 | 0.30 | 0.25 | 0.37 | 0.58 |
| FRA 3×6 | 4.15 | 1.07 | 0.42 | 0.39 | 0.38 | 0.35 | 0.54 | 0.65 |
| FRA 6x9 | 3.69 | 1.16 | 0.77 | 0.47 | 0.48 | 0.44 | 0.59 | 0.71 |
| FRA 9x12 | 3.45 | 1.29 | 1.23 | 0.61 | 0.65 | 0.51 | 0.59 | 0.75 |
| FRA 12x15 | 3.36 | 1.45 | 1.59 | 0.78 | 0.90 | 0.66 | 0.58 | 0.75 |

Source: Thomson Datastream.
1 Data at period end.

### 2.2 Exchange rates

In currency markets, the euro traced a significant descent against other leading currencies over the second half of 2011 . Specifically, euro exchange rates against the U.S. and Japanese currencies depreciated $10 \%$ and $14 \%$ respectively from mid-year onwards as far as 1.29 dollars and 100 yens. This downward movement was only briefly broken off during the month of October.


[^2]
### 2.3 Long-term interest rates

Among the advanced economies, long-term sovereign yields continued to diverge, with the countries seen as soundest (United States, Germany and the United Kingdom) moving separately from those betraying more signs of fragility. Among the first group, yields dropped from mid-year values of over $3 \%$ to around $2 \%$ or lower at the annual close. Conversely, most euro-area economies saw their yields head steadily higher with two interruptions. The first was in August, in reaction to the ECB's launch of its bond-buying programme on secondary markets, and the second in December, when the market began pricing in hopes of a fissureless EU pact to solve the problems of the debt crisis. But the eventual agreement by a broad group of countries to advance towards a fiscal union had no more than a modest impact. In fact the long-term bond yields of several among their number ended the year testing decade highs (see figure 4).

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


Source: Thomson Datastream.

As table 4 shows, three-, five- and ten-year yields in the United States, United Kingdom and euro area experienced a steady fall from the second quarter on, ${ }^{4}$ which in the case of ten-year bonds extended to approximately 100 bp . After an increase to the month of April, fuelled by moderately brighter economic prospects, the deepening euro debt crisis served to intensify the safe-haven role of some of these instruments, while the growth stall augured from mid-year onwards favoured the run--down in their yields. In Japan, long-term yields also moved lower, albeit by a smaller margin (between 7 bp and 18 bp depending on the maturity) and from a far lower start-out level. By the 2011 close, ten-year bond yields were down to $1.9 \%$ in the United States, $2.0 \%$ in the United Kingdom and $1.0 \%$ in Japan.

[^3]Medium and long government bond yields ${ }^{1}$ (\%)

|  | Dec 07 | Dec 08 | Dec 09 | Dec 10 | Mar 11 | Jun 11 | Sep 11 | Dec 11 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Euro area |  |  |  |  |  |  |  |  |
| 3 year | 3.96 | 2.07 | 1.55 | 1.16 | 1.82 | 1.69 | 0.51 | 0.41 |
| 5 year | 4.04 | 2.50 | 2.27 | 1.91 | 2.53 | 2.20 | 1.00 | 0.92 |
| 10 year | 4.27 | 3.04 | 3.22 | 2.90 | 3.24 | 2.98 | 1.87 | 1.99 |
| United States |  |  |  |  |  |  |  |  |
| 3 year | 3.12 | 1.07 | 1.37 | 0.98 | 1.15 | 0.70 | 0.35 | 0.38 |
| 5 year | 3.49 | 1.51 | 2.33 | 1.92 | 2.10 | 1.57 | 0.89 | 0.88 |
| 10 year | 4.10 | 2.40 | 3.59 | 3.29 | 3.41 | 2.99 | 1.96 | 1.97 |
| United Kingdom |  |  |  |  |  |  |  |  |
| 3 year | 4.48 | 2.60 | 1.67 | 1.14 | 1.76 | 1.18 | 0.65 | 0.55 |
| 5 year | 4.61 | 2.80 | 2.69 | 2.07 | 2.56 | 1.99 | 1.22 | 0.82 |
| 10 year | 4.63 | 3.33 | 3.94 | 3.61 | 3.63 | 3.25 | 2.48 | 2.12 |
| Japan |  |  |  |  |  |  |  |  |
| 3 year | 0.78 | 0.60 | 0.21 | 0.25 | 0.28 | 0.21 | 0.17 | 0.18 |
| 5 year | 1.04 | 0.80 | 0.47 | 0.46 | 0.50 | 0.41 | 0.34 | 0.34 |
| 10 year | 1.53 | 1.31 | 1.26 | 1.18 | 1.24 | 1.13 | 1.00 | 1.00 |

Source: Thomson Datastream.
1 Monthly average of daily data.

Sovereign credit spreads, five-year CDS
Economies receiving financial assistance

basis points


Jan- Apr- Jul- Oct- Jan- Apr- Jul- Oct-
$\begin{array}{llllllll}10 & 10 & 10 & 10 & 11 & 11 & 11 & 11\end{array}$

Other economies

| _Spain | _- Germany |
| :--- | :--- |
| _UK |  |
| _USA | USA |
| Belgium |  |



Jan- Apr- Jul- Oct- Jan- Apr- Jul- Oct $\begin{array}{llllllll}10 & 10 & 10 & 10 & 11 & 11 & 11 & 11\end{array}$

Source: Thomson Datastream.

In Europe, sovereign spreads climbed more or less continually from the second quarter on, after the respite of the opening quarter. Behind the initial decline were the debt crisis episode sparked by Portugal's plea for financial assistance to the EU and IMF, and mounting concerns about the sustainability of Greece's public finances. As we can
see from figure 5 (right-hand panel), what stood out in this crisis episode was the spread of tensions to other European economies that had previously steered clear. From early April to the end of December, the sovereign spreads of this group of countries began to escalate. The list extends to Italy, with a 141 bp increase in its sovereign risk premium to 485 bp; Spain, with an increase of 227 bp to 379 bp; Belgium, with an increase of 132 bp to 309 bp; and, finally, France, with an increase of 72 bp to 217 bp. As remarked on earlier, these spreads eased slightly in the last days of the year.

Indicators of spillover effects between European sovereign CDS show that the systemic risk factor common to these markets, and apparently emanating from the Greek CDS, is still running high. Specifically, at end-2011, around 90\% of non-predictable variations in the CDS premiums of Italy, Spain, France and Belgium could, according to this indicator, be attributed to contemporaneous changes in Greek credit risk. In other words, Greece's credit risk shocks were exerting a powerful influence on CDS movements elsewhere in Europe whether by direct means ("pure" contagion) or as early indicators of some other systemic risk factor present simultaneously in a broad group of European economies.

Debt market turmoil also took its toll on European financial institutions by way of their heavy exposure to the bonds of affected countries. Doubts about the true extent of this exposure and the possibility that banks might have to accept a haircut on Greek debt holdings sent risk premiums rising sharply, until relief came in the form of the ECB's liquidity support measures (see figure 7).

Greek debt and systemic risk in European sovereign debt markets ${ }^{1}$
FIGURE 6


## Source: CNMV.

1 The figure shows the percentage of variance in the CDS premiums 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. The scale of contagion on a given day is calculated from available data for the 100 days preceding the current date, with the series also filtered by 30 -day moving averages.

The spiralling costs of debt financing on international markets has forced financial institutions to cut back their issuance (see figure 8), to the extent that their net financing turned negative from mid-year onwards, with redemptions exceeding issues.

Bank sector credit spreads, five-year CDS


Source: Thomson Datastream, indices drawn up by CMA.

Corporate bond spreads also climbed sharply from the second quarter of 2011, especially among lower-rated issuers, though without rivalling the highs reached after the Lehman Brothers debacle of 2008 (see table 5). Tougher funding conditions on international markets continued to make themselves felt in the form of steadily shrinking net debt issuance, which was again dominated by government paper (around $70 \%$ of the 2011 total). As we can see from the figure 8 (second chart), the decline in issuance was particularly marked in Europe.

Corporate bond risk premiums ${ }^{1}$ TABLE 5
Spread versus ten-year government bonds, basis points

|  | Dec 07 | Dec 08 | Dec 09 | Dec 10 | Mar 11 | Jun 11 | Sep 11 | Dec 11 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Euro area |  |  |  |  |  |  |  |  |
| High yield | 462 | 2,181 | 714 | 462 | 388 | 413 | 703 | 739 |
| BBB | 163 | 621 | 242 | 170 | 151 | 152 | 291 | 287 |
| AAA | 82 | 160 | 28 | 14 | 23 | 5 | -12 | -22 |
| United States |  |  |  |  |  |  |  |  |
| High yield | 541 | 1,923 | 582 | 461 | 400 | 457 | 692 | 683 |
| BBB | 222 | 737 | 189 | 145 | 122 | 134 | 240 | 261 |
| AAA | 105 | 315 | 51 | 37 | 46 | 49 | 79 | 98 |

[^4]


- Guaranteed financial private sector
- Non-guaranteed financial private sector - Non-financial private sector - Public sector


Source: Dealogic. Data as at 30 December 2011.

### 2.4 International stock markets

After a third quarter of widespread losses, stocks staged a modest rally in the fourth quarter that extended to most leading indices expect Japan's and those of certain European markets. The biggest rises - of almost $10 \%$ - went to U.S. bourses, while in Europe top performers were the German $\operatorname{Dax}(7.2 \%)$ and the Eurostoxx 50 ( $6.1 \%$ ), with remaining markets posting smaller gains (see figure 9 and table 6).

Most stock markets began the year in upbeat mood, with price gains reflecting the improved economic prospects then coming through. Prices held up well during the second quarter but then a new wave of euro-area debt market turbulence unleashed by Portugal's call for financial aid and mounting concerns over the sustainability of Greece's public finances, compounded by a worsening outlook for the world economy, sent markets plunging into losses which deepened through the third quarter. The mild upswing of the closing months came too late to compensate the preceding falls, with the result that all main euro-area indices recorded year-long declines of over $14 \%$, while the United Kingdom's FTSE 100 shed $5.6 \%$ and the U.S. DJIA climbed by $5.5 \%$.

Volatility of equity markets held at reasonable levels over the first months of the year then built up progressively in the second half to readings of $30 \%$ to $40 \%$, depending on the index. This was less than the peaks reached in earlier disruptions, but still substantially higher than historical averages of close to $20 \%$. Note also that the volatility of European bourses stood at the high end of the observed range (see figure 10).

Performance of main stock indices FIGURE 9


[^5]|  | 2007 | 2008 | 2009 | 2010 | Q1 11 | Q2 11 | Q3 11 | $\text { Q4 } 11$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | prior qt. |  |
| World |  |  |  |  |  |  |  |  |  |
| MSCI World | 7.1 | -42.1 | 27.0 | 9.6 | 4.3 | -0.3 | -17.1 | 7.1 | -7.6 |
| Euro area |  |  |  |  |  |  |  |  |  |
| Euro Stoxx 50 | 6.8 | -44.4 | 21.1 | -5.8 | 4.2 | -2.1 | -23.5 | 6.3 | -17.1 |
| Euronext 100 | 3.4 | -45.2 | 25.5 | 1.0 | 3.2 | -1.2 | -20.6 | 6.0 | -14.2 |
| Dax 30 | 22.3 | -40.4 | 23.8 | 16.1 | 1.8 | 4.8 | -25.4 | 7.2 | -14.7 |
| Cac 40 | 1.3 | -42.7 | 22.3 | -3.3 | 4.8 | -0.2 | -25.1 | 6.0 | -17.0 |
| Mib 30 | -8.0 | -48.7 | 20.7 | -8.7 | 6.4 | -7.1 | -23.8 | 1.0 | -24.0 |
| Ibex 35 | 7.3 | -39.4 | 29.8 | -17.4 | 7.3 | -2.0 | -17.5 | 0.2 | -13.1 |
| United Kingdom |  |  |  |  |  |  |  |  |  |
| FTSE 100 | 3.8 | -31.3 | 22.1 | 9.0 | 0.1 | 0.6 | -13.7 | 8.7 | -5.6 |
| United States |  |  |  |  |  |  |  |  |  |
| Dow Jones | 6.4 | -33.8 | 18.8 | 11.0 | 6.4 | 0.8 | -12.1 | 12.0 | 5.5 |
| S\&P 500 | 3.5 | -38.5 | 23.5 | 12.8 | 5.4 | -0.4 | -14.3 | 11.2 | 0.0 |
| Nasdaq-Cpte | 9.8 | -40.5 | 43.9 | 16.9 | 4.8 | -0.3 | -12.9 | 7.9 | -1.8 |
| Japan |  |  |  |  |  |  |  |  |  |
| Nikkei 225 | -11.1 | -42.1 | 19.0 | -3.0 | -4.6 | 0.6 | -11.4 | -2.8 | -17.3 |
| Topix | -12.2 | -41.8 | 5.6 | -1.0 | -3.3 | -2.3 | -10.4 | -4.3 | -18.9 |

Source: Datastream.
1 In local currency.

Historical volatility of main stock indices


[^6]The dividend yield of main international stock indices charted a more or less continuous ascent until the end of the third quarter and then fell back in the fourth. U.S. and Japanese indices again occupied the bottom rungs with yields close to $2.5 \%$, at a distance from their European peers (see table 7).

Dividend yield of main stock indices (\%) TABLE 7

|  | 2006 | 2007 | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | Mar 11 | Jun 11 | Sep 11 | Dec 11 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| S\&P 500 | 1.9 | 2.2 | 3.5 | 2.3 | 2.2 | 2.2 | 2.4 | 2.8 | 2.6 |
| Topix | 1.1 | 1.5 | 2.7 | 1.8 | 1.9 | 2.1 | 2.2 | 2.4 | 2.6 |
| Euro Stoxx 50 | 3.5 | 3.7 | 7.5 | 4.2 | 4.8 | 5.3 | 5.9 | 7.3 | 6.4 |
| Euronext 100 | 3.3 | 3.8 | 7.9 | 4.2 | 4.3 | 4.9 | 5.4 | 6.4 | 5.7 |
| FTSE 100 | 3.8 | 3.9 | 5.8 | 3.7 | 3.8 | 3.4 | 3.6 | 4.2 | 4.2 |
| Dax 30 | 2.3 | 2.5 | 5.4 | 3.5 | 2.9 | 3.3 | 3.2 | 4.2 | 4.2 |
| Cac 40 | 3.8 | 4.3 | 8.1 | 5.0 | 5.2 | 5.7 | 6.3 | 8.0 | 7.1 |
| Mib 30 | 3.7 | 3.8 | 8.6 | 3.4 | 3.8 | 3.8 | 4.3 | 5.6 | 5.5 |
| Ibex 35 | 3.0 | 3.1 | 6.2 | 3.9 | 5.9 | 7.6 | 7.3 | 8.7 | 7.0 |

Source: Thomson Datastream.

Price-earning ratios traced the opposite course, with falls to September giving way to a small run-up in the closing months as prices rallied on main world bourses. Even so, P/E levels, as figure 11 shows, remain near the lowest levels of the past two decades, at around 8 or 9 times in the case of European indices and 11 times in Japan and the United States.
$P / E^{1}$ of main stock indices


Source: Thomson Datastream. Data for the last session of each month.
1 The earnings per share making up the ratio denominator is based on 12-month forecasts.

|  | 2006 | 2007 | 2008 | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | Mar 11 | Jun 11 | Sep 11 | Dec 11 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| S\&P 500 | 15.1 | 14.7 | 11.3 | 14.6 | 13.1 | 13.1 | 12.4 | 10.7 | 11.7 |
| Topix | 17.8 | 15.1 | 15.6 | 19.3 | 13.6 | 12.0 | 12.8 | 11.4 | 11.4 |
| Euro Stoxx 50 | 12.2 | 11.6 | 7.8 | 11.5 | 9.5 | 9.6 | 8.9 | 7.6 | 8.4 |
| Euronext 100 | 12.9 | 12.3 | 8.3 | 12.7 | 10.6 | 10.6 | 10.0 | 8.6 | 9.2 |
| FTSE 100 | 12.4 | 12.1 | 8.3 | 12.5 | 10.5 | 10.1 | 9.4 | 8.6 | 9.2 |
| Dax 30 | 12.8 | 12.3 | 8.8 | 12.7 | 10.8 | 10.3 | 9.9 | 8.1 | 8.9 |
| Cac 40 | 12.7 | 11.8 | 8.0 | 12.1 | 10.0 | 10.0 | 9.4 | 7.8 | 8.5 |
| Mib 30 | 13.1 | 11.5 | 7.6 | 12.4 | 10.0 | 10.1 | 9.2 | 7.7 | 8.4 |
| Ibex 35 | 14.3 | 13.0 | 8.7 | 12.3 | 9.7 | 10.4 | 9.8 | 8.3 | 9.1 |

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

| Performance of other leading world indices (\%) TABLE 9 |
| :--- | :--- |



[^7]Emerging market stock indices performed broadly in line with those of the advanced economies. While the first-half period was marked by divergence, with Eastern European indices powering ahead of the rest, the third quarter was characterised by steeply falling prices in a majority of markets, which tended to revert in the closing months. Among the markets still falling to the annual close were those of China ( $-6.8 \%$ ), India ( $-8.0 \%$ ) and certain East European countries (see table 9). Overall, the year ended with similar losses on all main emerging indices, at times exceeding those of the advanced economies. Among the worst performers were the Argentinean Merval (-30.1\%) and Asian indices like Taiwan (-21.2\%), India (-25.7\%) and China (-21.7\%).

Risk valuation in emerging economies

Emerging markets stock index (MSCI)


Emerging market bond spreads (EMBI)




Source: Thomson Datastream and Bloomberg. Data to 15 December.

Trading volume on main international stock markets
TABLE 10

| Billion euros |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Exchange | 2007 | 2008 | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | Q1 11 | Q2 11 | Q3 11 | Q4 114 |
| United States $^{1}$ | 32,758 | 48,488 | 22,451 | 23,188 | 5,283 | 5,073 | 6,471 | 3,644 |
| New York | 21,177 | 23,042 | 12,627 | 13,553 | 3,207 | 2,932 | 3,742 | 2,117 |
| Tokyo | 4,713 | 3,816 | 2,656 | 2,872 | 894 | 656 | 716 | 383 |
| London $^{2}$ | 7,545 | 4,374 | 1,270 | 2,084 | 571 | 506 | 534 | 300 |
| Euronext | 4,102 | 3,028 | 1,383 | 1,533 | 429 | 365 | 421 | 222 |
| Deutsche Börse $^{\text {BME }}$ | 3,144 | 3,211 | 1,084 | 1,237 | 324 | 307 | 362 | 187 |
| BM $^{3}$ | 1,666 | 1,243 | 886 | 1,037 | 247 | 238 | 234 | 206 |

[^8]According to the World Federation of Exchanges (WFE), worldwide stock market trading volume climbed $1.6 \%$ between January and November ( $1.8 \%$ in 2010) as far as 59.3 trillion dollars. By region, we can say that trading volumes rose on U.S. markets and receded across most of Asia. In Europe, the story varied from one country to another with higher turnover in Germany ( $1.8 \%$ ), the Scandinavian markets ${ }^{5}$ ( $5.5 \%$ ) and the NYSE Euronext ( $0.5 \%$ ), contrasting with the falls experienced in the United Kingdom ( $-1.9 \%$ ) and Spain ( $-10.8 \%$ ).

## 3 Spanish markets

### 3.1 Fixed-income markets

The climate on domestic fixed-income markets was again dominated by the ongoing crisis in European sovereign debt markets in the second half of the year. The perceived risk of Spanish debt, which had lessened somewhat in the opening quarter, heightened in the months that followed and only abated slightly in the last days of 2011.

As a result, interest rates on Spanish government bills rose considerably in the sec-ond-half period. The yields of three-, six- and twelve-month Spanish Treasury bills jumped 74 bp, 163 bp and 64 bp between June and December 2011 as far as $2.20 \%$, $3.47 \%$ and $3.27 \%$ respectively (see table 11 ).

The story with commercial paper rates was broadly similar, though second-half rises were on a rather smaller scale. By the 2011 close, three-, six- and twelve-month rates stood respectively at $2.74 \%, 3.52 \%$ and $3.77 \%$.
Short-term interest rates ${ }^{1}$ (\%) TABLE 11

|  | Dec 08 | Dec 09 | Dec 10 | Mar 11 | Jun 11 | Sep 11 | Dec 11 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| Spanish Treasury bills |  |  |  |  |  |  |  |
| 3 month | 2.00 | 0.42 | 1.60 | 0.96 | 1.46 | 1.48 | 2.20 |
| 6 month | 2.09 | 0.65 | 2.71 | 1.40 | 1.84 | 2.41 | 3.47 |
| 12 month | 2.10 | 0.88 | 3.09 | 2.10 | 2.63 | 3.21 | 3.27 |
| Commercial paper ${ }^{2}$ |  |  |  |  |  |  |  |
| 3 month | 3.09 | 0.76 | 1.37 | 1.29 | 1.57 | 1.76 | 2.74 |
| 6 month | 3.63 | 1.25 | 2.52 | 2.03 | 2.12 | 3.21 | 3.52 |
| 12 month | 3.74 | 1.63 | 3.04 | 2.66 | 2.73 | 3.52 | 3.77 |

Source: Thomson Datastream and CNMV.
1 Average daily data.
2 Interest rates at issue.

Three-, five- and ten-year government bond yields tended to mirror the course of short-term paper. Hence first-quarter falls gave way to an ascent lasting through

[^9]most of the year, except for occasional dips ascribable in part to the ECB's secondary market debt purchases. By the annual close, Government bonds in three, five- and ten-year tenors were yielding $3.5 \%, 4.0 \%$ and $5.3 \%$ respectively, after the sharp drop of the closing weeks.

Spanish government debt yields


Source: Thomson Datastream.

In parallel, Spanish ten-year spreads over the corresponding German benchmark widened through most of the year to a mid-November high of 470 bp (see figure 14), then narrowed a little in the closing weeks to the neighbourhood of 360 bp . Note also that the reduction in the risk premium in this last period surpassed that of other euro-area economies. Indicators of the spillover effects on the Spanish economy of sovereign credit risk - as with other major European economies - (see figure 6) reveal that variations in Greece's credit risk were the most powerful explanatory factor for cross-border transmission in late 2011 (see figure 15).

Risk premium of Spanish government debt


[^10]

Source: CNMV
1 Spillover indicators show the percentage variance in Spanish CDS premiums that is not ascribable to historical information but to contemporaneous shocks in the credit risk of Greece, Ireland, Portugal and Italy.

Long-term corporate bond yields saw a significant advance that was most intense in the fourth quarter and in longer dated instruments. Three-, five- and ten-year rates closed the year at $5.6 \%, 6.3 \%$ and $9.2 \%$ respectively (see table 12).


Source: Reuters and CNMV.
1 Monthly average of daily data.

Corporate bond spreads moved in parallel to their sovereign equivalent. As we can see from figure 16, the average CDS premiums of financial corporations peaked at around 750 bp at end-November, while the average premiums of non-financial companies traced an altogether gentler curve (by way of an annual high approaching 350 bp ).


Source: Thomson Datastream and CNMV.
1 Simple average.

The volume of fixed-income issues registered with the CNMV rose $27.8 \%$ to a fullyear total of 289.35 billion euros, in contrast to the $41.6 \%$ contraction of 2010 (see table 13). Issuance by non-financial corporations was even thinner than the year before, and confined basically to commercial paper. By instrument, growth in issuance was primarily due to increased sales of mortgage covered bonds, followed by territorial covered bonds, asset-backed securities and convertible bonds. Conversely, non-convertible bond issuance prolonged the downtrend of 2010.

This shift in the securities mix was consistent with the upswing in uncertainty that lasted through most of the year, fuelled by the re-eruption of the European sovereign debt crisis and its knock-on effects on the banking sector. This also explained banks' growing preference for more collateralised instruments like covered bonds and asset-backed securities, and securities like convertible bonds that count towards their regulatory capital.

Commercial paper was again the single most popular instrument in the fixed-income funding mix, with 103.86 billion euros or $35.9 \%$ of the year's total issuance, compared to $43.1 \%$ in 2010. It bears mention that commercial paper sales picked up in the closing months after three consecutive quarters' decline. This was because of growing recourse by the banks, who also extended the maturity of these instruments in order to raise short-term funds supplementing deposits.

Meantime, asset-backed securities grew their issue volumes $8.1 \%$ to 68.412 billion euros or $23.6 \%$ of the 2011 total. Within this category, mention should go to the bonds placed by the Fondo de Titulización del Déficit del Sistema Eléctrico (Electricity System Shortfall Securitisation Fund), most of whose 9.20 billion outstanding balance was issued in the first quarter. Finally, almost all the securitisation paper issued was retained by the originator, as has been the case since the crisis started.

Filed ${ }^{1}$ with the CNMV

|  | 2008 | 2009 | 2010 | 2010 |  | 2011 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Q3 10 | Q4 10 | Q1 11 | Q2 11 | Q3 11 | Q4 11 ${ }^{2}$ |
| FACE VALUE (million euros) | 476,276 | 387,476 | 226,449 | 61,635 | 55,737 | 77,161 | 59,900 | 38,694 | 113,599 |
| Mortgage bonds | 14,300 | 35,574 | 34,378 | 10,317 | 8,519 | 19,254 | 18,980 | 5,250 | 23,743 |
| Territorial bonds | 1,820 | 500 | 5,900 | 300 | 500 | 2,935 | 1,800 | 7,437 | 10,162 |
| Non-convertible bonds and debentures | 10,490 | 62,249 | 24,356 | 1,287 | 7,525 | 2,578 | 3,320 | 981 | 13,312 |
| Convertible/exchangeable bonds and debentures | 1,429 | 3,200 | 968 | 0 | 968 | 682 | 1,500 | 0 | 4,944 |
| Asset-backed securities | 135,253 | 81,651 | 63,261 | 28,190 | 16,497 | 26,585 | 11,168 | 10,449 | 20,210 |
| Domestic tranche | 132,730 | 77,289 | 62,743 | 28,190 | 16,473 | 23,706 | 10,130 | 10,116 | 18,844 |
| International tranche | 2,522 | 4,362 | 518 | 0 | 24 | 2,879 | 1,038 | 334 | 1,366 |
| Commercial paper ${ }^{3}$ | 311,738 | 191,342 | 97,586 | 21,541 | 21,728 | 24,928 | 23,131 | 14,576 | 41,227 |
| Securitised | 2,843 | 4,758 | 5,057 | 1,723 | 1,409 | 546 | 913 | 259 | 628 |
| Other | 308,895 | 186,583 | 92,529 | 19,818 | 20,319 | 24,382 | 22,218 | 14,317 | 40,600 |
| Other fixed-income issues | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Preference shares | 1,246 | 12,960 | 0 | 0 | 0 | 200 | 0 | 0 | 0 |
| Pro memoria: |  |  |  |  |  |  |  |  |  |
| Subordinate debt issues | 12,950 | 20,989 | 9,154 | 1,839 | 2,048 | 5,408 | 2,998 | 4,664 | 16,208 |
| Covered issues | 9,170 | 4,794 | 299 | 0 | 0 | 10 | 0 | 0 | 0 |

Abroad by Spanish issuers

|  | 2008 | 2009 | 2010 | 2010 |  | 2011 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Q3 10 | Q4 10 | Q1 11 | Q2 11 | Q3 11 | Q4 $11^{4}$ |
| FACE VALUE (million euros) | 112,366 | 149,686 | 127,731 | 38,063 | 28,686 | 47,938 | 34,228 | 13,838 | 7,510 |
| Long-term | 39,894 | 47,230 | 51,107 | 16,072 | 10,053 | 21,613 | 13,920 | 3,597 | 2,872 |
| Preference shares | 0 | 3,765 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Subordinated debt | 70 | 2,061 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bonds and debentures | 39,360 | 41,404 | 50,807 | 16,072 | 10,053 | 21,613 | 13,920 | 3,597 | 2,872 |
| Asset-backed securities | 464 | 0 | 300 | 0 | 0 | 0 | 0 | 0 | 0 |
| Short-term | 72,472 | 102,456 | 76,624 | 21,991 | 18,633 | 26,325 | 20,308 | 10,241 | 4,638 |
| Commercial paper | 72,472 | 102,456 | 76,624 | 21,991 | 18,633 | 26,325 | 20,308 | 10,241 | 4,638 |
| Securitised | 425 | 108 | 248 | 37 | 49 | 97 | 75 | 36 | 11 |

## Source: CNMV and Bank of Spain.

1 Including those admitted to trading without an issue prospectus.
2 Data to 31 December 2011.
3 Figures for commercial paper correspond to amounts placed.
4 Available data to 31 October 2011.

Mortgage bonds did brisk business, with new operations worth 67.23 billion euros, doubling the volume of 2010 and lifting them from $15.2 \%$ to $23.2 \%$ of total issuance. The boom in collateralised instruments also extended to territorial bonds. These bonds backed by loans granted to public corporations totalled 22.33 billion euros against just 5.90 billion the year before, and accounted for $7.7 \%$ of 2011 issuance (2.6\% in 2010), beating non-convertible bonds down a place.

At 20.19 billion euros, non-convertible bond issuance contracted more than any other, as far as $7.0 \%$ of annual volumes, $17.1 \%$ less than in 2010 . This decline partly reflects financial institutions' lower take-up of the government guarantee scheme launched in 2009. In that year alone, Spain's banks issued 47.86 billion euros in government--backed paper ( $77 \%$ of all non-convertible bonds), dropping to 13.04 billion in 2010 and 5.36 billion in 2011.

The drive by national supervisors and European Banking Authority (EBA) to reinforce the solvency of credit institutions - requiring the country's five largest listed banks to achieve a core capital ratio of $9 \%$ by July 2012 and bringing forward compliance with Basel III, the new prudential framework for the banking industry - urged these institutions to intensify their efforts to raise own funds. The instruments of choice were in most cases bonds compulsorily convertible into equity which, once converted, enjoy the consideration of top-quality capital. Issuance of this kind of convertible climbed to 7.13 billion euros $-2.5 \%$ of the annual total - from a bare one billion in 2010 . Conversely, issuance of preference shares, whose loss-absorbing power is curtailed by the new banking rules, dropped back to 200 million euros.

Net long-term debt issuance in Spain ${ }^{1}$
FIGURE 17
By financial instrument ${ }^{2}$


[^11]

Source: Dealogic and CNMV. Data to 30 December 2011.

Finally, foreign debt financing to October 2011 (the latest month for which data are available) summed 100 billion euros, on a par with the same period in 2010. Issuance, however, tended to shrink as the months progressed, particularly at the long end of the curve, in contrast to the stable activity of the previous year (see table 13). Specifically, long-term issues totalled 42 billion, of which $85 \%$ was raised in the first six months, against the 61 billion approximately raised through short-term instruments ( $76 \%$ in the first six months).

### 3.2 Equity markets

### 3.2.1 Prices

The European sovereign debt crisis continued to weigh on Spanish share prices over most of 2011. Financial market tensions flared anew in the third quarter, as the world economy relapsed into slowdown. However the force of these downside factors abated in the closing month, allowing the Ibex 35 to scrape a modest fourthquarter gain of $0.2 \%$ on the heels of the $17.5 \%$ slide of the preceding quarter and a first-half advance of $5.1 \%$ (see table 14). This helped temper the index's fall and leave the full-year outcome at $-13.1 \%$.

Medium and small cap stock indices evolved broadly in line with the Ibex 35 . Hence the Ibex Medium Cap shed $20.6 \%$ in the third quarter followed by a moderate fourth--quarter gain of $1.0 \%$, which summing the $-1 \%$ of the first-half period gave a full-year result of $-20.7 \%(-5.6 \%$ in 2010). The Ibex Small Cap was the worst performing of Spanish equity indices over the second-half period ( $-31 \%$ ) and ended up $25.1 \%$ in negative territory ( 6.8 points more than in 2010). Meantime, Latin American indices rallied by over $8 \%$ after a run of losses that was most intense in the third quarter, to close with falls of over $17 \%$, compared to 2010 gains upwards of $9 \%$ (see table 14).

|  | 2007 | 2008 | 2009 | 2010 | Q1 $11^{1}$ | Q2 $11^{1}$ | Q3 $11^{1}$ | Q4 11 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | $\%$ $y / y$ |
| Ibex 35 | 7.3 | -39.4 | 29.8 | -17.4 | 7.3 | -2.0 | -17.5 | 0.2 | -13.1 |
| Madrid | 5.6 | -40.6 | 27.2 | -19.2 | 7.5 | -2.7 | -17.8 | -0.6 | -14.6 |
| Ibex Medium Cap | -10.4 | -46.5 | 13.8 | -5.6 | 6.3 | -6.9 | -20.6 | 1.0 | -20.7 |
| Ibex Small Cap | -5.4 | -57.3 | 17.6 | -18.3 | 17.4 | -8.2 | -23.3 | -9.4 | -25.1 |
| FTSE Latibex All-Share | 57.8 | -51.8 | 97.2 | 9.0 | -3.2 | -9.9 | -18.9 | 8.6 | -23.3 |
| FTSE Latibex Top | 33.7 | -44.7 | 79.3 | 9.7 | -3.9 | -8.1 | -15.6 | 11.2 | -17.1 |

Source: Thomson Datastream.
1 Change vs. previous quarter.

The implied volatility of the Ibex 35 swung higher in the third quarter of 2011. This marked a break with the downtrend initiated in late 2010, with only a brief spike in the month of March coinciding with the Japan earthquake and nuclear scare (see figure 19). Readings in the period peaked at over $60 \%$, rivalling with the heights reached in second-quarter 2010 during the first throes of the Greek debt crisis. However, the subsequent easing of financial market tensions allowed index volatility to settle back below $40 \%$, compared to a historical average since 1999 of $24.9 \%$.

Performance of Ibex 35 and implied volatility ${ }^{1}$


Source: Thomson Datastream and MEFF.
1 Implied at-the-money (ATM) volatility on nearest expiry.

Prices on the Madrid General Index (IGBM) levelled off after the sharp run-down of the third quarter, with some shares even managing a small fourth-quarter gain (see table 15). The steepest losses of the closing months fell to technology and telecom-
munications ( $-6.6 \%$ vs. $-14.7 \%$ in the third quarter), followed by consumer goods ( $-0.7 \%$ vs. $-2.9 \%$ ). At the other extreme, financial and real estate services posted an overall advance of $0.2 \%(-21.5 \%$ in the third quarter), though note that real estate on a stand-alone basis fell $17.2 \%$ ( $-38.3 \%$ in the third quarter). Remaining sectors (oil and energy, basic materials, industry and construction, and consumer services) posted price rises of between $0.6 \%$ and $3.8 \%$ after third-quarter losses running from $-17 \%$ to $-28 \%$.

We can see then that the bear trend continued through 2011 in all sectors except consumer goods (up by $5.7 \%$ ). The worst performing sectors in the full-year period were consumer services ( $-24.2 \%$ ), technology and telecommunications ( $-20.9 \%$ ) and financial and real estate services ( $-18.9 \%$ ). In the last case, the real estate sub-sector again trailed behind with an annual fall of $-47 \cdot 5 \%$. Rather less intense were the losses posted by basic materials, industry and construction (-14.3\%) and oil and energy ( $-2.7 \%$ ).

The shares exerting the biggest downside impact on the IGBM in the fourth-quarter period were the largest cap telecommunications operator and banking group. The index's year-long performance was also heavily conditioned by the price falls of these two issuers (see table 16).

## Performance of the Madrid Stock Exchange by sector

TABLE 15 and leading shares ${ }^{1}$ (annual \% unless otherwise indicated)

|  | Weighting ${ }^{2}$ | 2010 | Q1 11 | Q2 11 | Q3 11 | Dec 11 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{array}{r} \% \\ \text { prior qt. } \end{array}$ | $\%$ $y / y$ |
| Financial and real estate services | 38.05 | -31.7 | 7.9 | -4.4 | -21.5 | 0.2 | -18.9 |
| Real estate and others | 0.16 | -53.3 | 26.7 | -19.0 | -38.3 | -17.2 | -47.5 |
| Banks | 36.20 | -33.1 | 6.6 | -4.4 | -21.9 | 0.2 | -20.3 |
| BBVA | 11.16 | -38.2 | 13.2 | -3.9 | -22.2 | 8.1 | -8.5 |
| Santander | 20.36 | -30.5 | 4.9 | -2.8 | -21.9 | -3.8 | -23.3 |
| Oil and energy | 19.93 | -8.6 | 11.5 | 0.9 | -16.7 | 3.8 | -2.7 |
| Iberdrola | 8.66 | -7.7 | 6.4 | 0.0 | -15.2 | -4.6 | -13.9 |
| Repsol YPF | 6.20 | 11.3 | 15.9 | -1.0 | -16.5 | 18.8 | 13.8 |
| Basic materials, industry and construction | 7.72 | -15.2 | 11.2 | -6.2 | -19.5 | 2.1 | -14.3 |
| Construction | 4.49 | 17.7 | 13.8 | -3.8 | -14.4 | -0.6 | -6.9 |
| Technology and telecommunications | 22.72 | -12.8 | 3.4 | -3.9 | -14.7 | -6.6 | -20.9 |
| Telefónica | 20.98 | -13.1 | 4.1 | -4.6 | -14.4 | -7.2 | -21.1 |
| Consumer goods | 7.17 | 17.0 | 3.3 | 6.1 | -2.9 | -0.7 | 5.7 |
| Inditex | 4.75 | 29.1 | 1.0 | 11.0 | 2.4 | -1.7 | 12.9 |
| Consumer services | 4.41 | -0.1 | 9.8 | -4.7 | -27.9 | 0.6 | -24.2 |

[^12]|  |  | Dec 11 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | Contribution to <br> change (\%) |  |
| Share | Sector | Change (pp) |  |  |  |
|  | /prior qt. | /Dec 10 | /prior qt. | /Dec10 |  |
| Negative impact |  |  |  |  |  |
| Telefónica | Technology and telecommunications | -1.51 | -4.43 | 1,011 | 37 |
| Banco Santander | Financial and real estate services | -0.77 | -4.74 | 512 | 40 |
| Iberdrola | Oil and energy | -0.40 | -1.20 | 265 | 10 |
| ACS | Basic materials, industry and construction | -0.22 | -0.54 | 144 | 5 |
| Positive impact |  |  |  |  |  |
| Repsol YPF | Oil and energy | 1.16 | 0.86 | -779 | -7 |
| BBVA | Financial and real estate services | 0.90 | -0.95 | -603 | 8 |
| CaixaBank | Financial and real estate services | 0.21 | -0.03 | -141 | 0 |

Source: Thomson Datastream and Bolsa de Madrid.
1 The shares listed are those having most impact (equal to or greater than 0.15 pp in absolute terms) on the quarterly change in the IGBM.

Since the subprime debacle of summer 2007, only one IGBM sector, consumer services, has managed to get back above its pre-crisis levels (see figure 20), while remaining sectors are still trading short by margins from $60 \%$ (basic materials, industry and construction and financial and real estate services) to $20 \%$ (technology and telecommunications). The sector worst hit by the crisis dogging European sovereign debt markets from the start of 2010 was again financial and real estate services. Meantime, the technology and telecommunications, basic materials, industry and construction, and oil and energy sectors all exceeded their March 2009 lows, though only technology and telecommunicationss was below this mark at the closing date for our report.


[^13]The distribution of IGBM companies according to movements in price was closer to that of the second quarter and a lot better than in the third, although the balance remained on the negative side (see table 17). Specifically, the percentage of companies posting share price falls since the previous quarter dropped from the $97 \%$ of the third quarter to a more encouraging $58 \%$. Likewise, $13 \%$ of companies reported gains of over $10 \%$ against the zero figure of the quarter before.

| Performance range of IGBM companies |  |  | TABLE 17 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| \% total IGBM companies | Q4 10 | Q1 11 | Q2 11 | Q3 11 | Q4 11 |
| $\geq 25 \%$ | 1.7 | 19.7 | 0.0 | 0.0 | 1.7 |
| $10 \%$ to $25 \%$ | 12.6 | 34.2 | 6.8 | 0.0 | 11.3 |
| $0 \%$ to 10\% | 25.2 | 27.4 | 19.5 | 3.5 | 28.7 |
| $\mathbf{0 \%}$ | 60.5 | 18.8 | 73.7 | 96.5 | 58.3 |
| Pro memoria: total no. of companies |  |  |  |  |  |
|  | $\mathbf{1 1 9}$ | $\mathbf{1 1 7}$ | $\mathbf{1 1 8}$ | $\mathbf{1 1 5}$ | $\mathbf{1 1 5}$ |

Source: Thomson Datastream.

After holding at just under 1ox through the first-half period, the $\mathrm{P} / \mathrm{E}$ of the Ibex 35 dropped to a year-end level of 9.1. Similar falls on other advanced economy stock exchanges were preceded by a small decline over the first six months, allowing the Spanish multiple a degree of convergence (see table 8).

Earnings yield gap ${ }^{1}$ of the Ibex 35


Source: Thomson Datastream.
1 Difference between stock market yield, taken as earnings/price and ten-year bond yields. Monthly data to 30 December 2011.

The earnings yield gap (indicating the risk premium on equity investment versus long-term government bonds) began fluctuating sharply after the stability of the first-half period. Under closer scrutiny, most of these movements traced to stock
$\mathrm{P} / \mathrm{E}$ rather than long-term bonds, though both variables were appreciably more volatile. The resulting year-end gap of $5.6 \%$ was higher than the $4.9 \%$ of end-2010 and also the $3.1 \%$ historical average since January 1999 (see figure 21).

### 3.2.2 Trading, issuance and liquidity

Trading volume on the Spanish stock market contracted by $10.8 \%$ in 2011 in contrast to the $17 \%$ growth of the previous year (see table 18). Fourth-quarter average daily trading was 3.22 billion euros against the 3.55 billion of the third quarter and the 3.85 billion of the first two. The resulting annual average of 3.60 billion euros compares unfavourably with the 4.05 billion of $2010 .{ }^{6}$

Trading volume on the Spanish stock market
TABLE 18

| Million euros |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 2008 | 2009 | 2010 | Q3 10 | Q4 10 | Q1 11 | Q2 11 | Q3 11 | Q4 11 |
| All exchanges | $\mathbf{1 , 2 4 3 , 3 8 7}$ | 886,135 | $1,037,282$ | 215,183 | 294,168 | 246,992 | 238,131 | 234,262 | 206,281 |
| Electronic market | $1,235,330$ | 880,544 | $1,032,447$ | 214,267 | 292,819 | 245,990 | 236,897 | 233,070 | 204,922 |
| Open outcry | 207 | 73 | 165 | 54 | 82 | 20 | 11 | 11 | 7 |
| of which SICAV ${ }^{2}$ | 25 | 20 | 8 | 1 | 0 | 2 | 3 | 1 | 0 |
| MAB $^{3}$ | 7,060 | 5,080 | 4,145 | 768 | 1,147 | 880 | 1,134 | 1,088 | 1,278 |
| Second market | 32 | 3 | 3 | 1 | 1 | 1 | 0 | 0 | 1 |
| Latibex | 758 | 435 | 521 | 93 | 119 | 102 | 89 | 93 | 73 |
| Pro memoria: non-resident trading (\% all exchanges) |  |  |  |  |  |  |  |  |  |

Source: CNMV and Directorate-General of Trade and Investments.
1 Cumulative data from 1 October to 30 December.
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 by a modest $2.7 \%$ in 2011 after the upswing of $2010(40.6 \%)$. Note that activity has stalled almost completely since the month of August (see table 19) in reaction to mounting volatility on financial markets and the run-down in share prices. Moreover, issuance in the rest of the year was confined to capital increases.

Finally, liquidity conditions in the Spanish stock market deteriorated in the third quarter to levels recalling the first quarter of 2009 . Fortunately some improvement was forthcoming in the closing months. The average bid/ask spread of the Ibex 35 climbed from mid-year levels of below $0.09 \%$ to a high of $0.18 \%$ in early September, then headed lower, with some fluctuations, to o.16\% at the December close. This is nonetheless well above the $0.10 \%$ average recorded since 2006 (see figure 22).

[^14]
## Equity issuance ${ }^{1}$

TABLE 19

|  | 2008 | 2009 | 2010 | Q3 10 | Q4 10 | Q1 11 | Q2 11 | Q3 11 | Q4 $11^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CASH AMOUNT ${ }^{3}$ (million euros) | 16,349 | 11,391 | 16,013 | 2,323 | 8,333 | 3,237 | 4,798 | 6,336 | 2,079 |
| Capital increases | 16,340 | 11,389 | 15,407 | 2,323 | 8,262 | 3,237 | 4,798 | 6,336 | 2,079 |
| Of which, rights offerings | 292 | 17 | 959 | 6 | 14 | 0 | 3,696 | 8 | 1,966 |
| National tranche | 292 | 15 | 62 | 6 | 14 | 0 | 3,696 | 8 | 1,966 |
| International tranche | 0 | 2 | 897 | 0 | 0 | 0 | 0 | 0 | 0 |
| Public offerings | 10 | 2 | 606 | 0 | 71 | 0 | 0 | 0 | 0 |
| National tranche | 10 | 2 | 79 | 0 | 71 | 0 | 0 | 0 | 0 |
| International tranche | 0 | 0 | 527 | 0 | 0 | 0 | 0 | 0 | 0 |
| NUMBER OF FILINGS ${ }^{4}$ | 54 | 53 | 69 | 12 | 29 | 17 | 23 | 26 | 26 |
| Capital increases | 53 | 53 | 67 | 12 | 28 | 17 | 22 | 26 | 26 |
| Of which, rights offerings | 2 | 2 | 12 | 2 | 4 | 0 | 3 | 3 | 2 |
| Of which, bonus issues | 18 | 11 | 15 | 3 | 7 | 2 | 5 | 8 | 7 |
| Public offerings | 2 | 1 | 3 | 0 | 1 | 0 | 1 | 0 | 1 |
| NUMBER OF ISSUERS ${ }^{4}$ | 39 | 34 | 46 | 10 | 23 | 13 | 16 | 22 | 15 |
| Capital increases | 38 | 34 | 45 | 10 | 22 | 13 | 15 | 22 | 15 |
| Of which, rights offerings | 2 | 2 | 12 | 2 | 4 | 0 | 3 | 3 | 2 |
| Public offerings | 2 | 1 | 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 October to 30 December.
3 Excluding amounts recorded in respect of cancelled transactions.
4 Including all transactions registered, whether or not they eventually went ahead.

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


[^15]II Reports and Analyses

## Economic and financial performance of listed companies in the first half of 2011

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## 1 Introduction

This article contains an analysis of the key highlights of the financial information contained in the reports ${ }^{1}$ for the first half of 2011 submitted to the CNMV by issuers.

The aggregate information analysed relates to the results, financial position, cash flows, number of employees and dividends paid. The 152 companies analysed belong to the following sectors: energy ( 10 companies), manufacturing ( 50 companies), retail and services ( 46 companies), construction and real estate ( 31 companies), banks ( 10 companies), savings banks ( 3 companies), ${ }^{2}$ and insurance ( 2 companies).

The analysis is carried out on the following basis:

- The data for analysis are obtained from the consolidated or individual periodic financial reports ${ }^{3}$ submitted to the CNMV by the issuers of shares or debt ${ }^{4}$ that are listed on a regulated Spanish market, where Spain is the home Member State.
- The aggregate figures exclude issuers that are subsidiaries of another listed group. However, when such issuers carry on their activity in a sector other than that of the parent company, their financial data are included in the figures for their sector.
- Data relating to periods other than the first half of 2011 have been calculated for the representative sample of the companies that were listed in the reference period.

In section 2 of this article we analyse the development of turnover since 2007, in sections 3 and 4 we present the behaviour of earnings and the return on equity and investment, in section 5 we look at the debt of non-financial companies. In section 6 we analyse the delinquency and solvency of credit institutions, and in sections 7, 8 and 9 we present the development of cash flows, workforce and dividends paid respectively. Our main conclusions are presented in section 10.

[^16]
## 2 Net turnover

Figure 1 shows the year-on-year rates of change in net turnover ${ }^{5}$ for the period between the first half of 2007 and the first half of 2011 . As can be seen, the year-on--year rate of change in the first half of 2011 was positive ( $8.9 \%$ ), thus maintaining the growth trend which began in the first half of 2010.

Rate of change in net turnover


Source: CNMV.

Rate of change in net turnover by industry
FIGURE 2


Source: CNMV.

[^17]Figure 2 shows the development of net turnover in the different sectors. All companies, except in the construction and real estate sector, recorded positive year-on-year rates of change in the first half of 2011 . It should be pointed out that the energy sector recorded a positive rate of change, but one which was significantly lower than the rate of change in 2010, and that the credit institutions sector went from a negative rate of change of $9.8 \%$ to a positive rate of $13.8 \%$.

By sector, the highlights are as follows:

- Energy. Turnover rose by $8.2 \%$ on the same period of the previous year. This was mainly due to the increase in the average price of crude oil - the average price of a barrel of Brent rose by $42.9 \%$ - and to the recovery in energy demand. These positive effects offset the negative impact resulting from: (i) the average $5.35 \%$ depreciation of the dollar against the euro, (ii) the lower production of crude oil resulting from the war in Libya and the social conflicts in Argentina, and (iii) the lower generation of hydraulic energy as a result of the drought in Chile.

In addition, it should be pointed out that the high growth rates in the first and second halves of $2010-26.2 \%$ and $20 \%$ respectively - were influenced by: (i) recording the sales to suppliers of last resort as revenue from 1 July 2009 costs were previously offset by revenue $-{ }^{6}$ and (ii) the business combinations in the sector in 2009.

- Manufacturing. The performance of manufacturing companies was uneven although, in general, positive with a growth rate of $9.7 \%$. There was clear improvement in the sub-sectors of basic metals, due to: (i) the rally in demand for stainless steel, although demand in Europe over recent months has been affected by the worsening of the financial crisis, (ii) the positive performance of the automotive sector in emerging markets such as Brazil and Mexico, (iii) the increase in sales in international markets, and (iv) the accounting effects of business combinations carried out in 2011. These factors were offset somewhat by the price war in the metal transformation industry which led to a drop in sales for one company which preferred to maintain its margins.
- Retail and services. Aggregate net turnover rose by $10.7 \%$ in this sector as a result of: (i) the increase in sales in international markets as a result of corporate operations carried out in the second half of 2010, and (ii) the accounting effect of a significant merger with effects as from January 2011.
- Construction and real estate. The strong impact of the economic crisis on the construction and real estate sector in Spain has still not allowed it to reactivate and it is the only sector which saw its turnover fall ( $-1 \%$ ). This fall is a result of a $56.3 \%$ drop in real estate companies, which was offset by a $2.2 \%$ increase in the construction sub-sector.

[^18]The across-the-board fall in the net turnover of real estate companies was the result of the reduction in residential developments, which was mitigated, in some cases, by sales made to financial institutions within the framework of refinancing processes. The increase in the turnover of construction companies resulted from significant acquisitions in 2011 . If we exclude this operation, sales fell by $5.4 \%$ compared with the first half of 2010, with a reduction in revenue in the domestic market, resulting from the contraction in public investment and the fall in the real estate market, which was partially offset by the growth in business abroad and environmental services.

- Credit institutions. As indicated, aggregate revenue from interest and similar revenue recorded by credit institutions rose by $13.8 \%$ compared with the first half of 2010. This increase was basically due to the rise in interest rates resulting from rises in inflation and liquidity tensions in the markets. As an example, the one-year Euribor - the main mortgage benchmark rate - rose from 1.28\% at the end of June 2010 to $2.14 \%$ in June 2011.
- Insurance companies. The amount of premiums allocated to the year, net of reinsurance, grew by $10.1 \%$ year-on-year for life insurance and $3.3 \%$ for non-life insurance as a result of the positive performance of the international business (mainly on the Americas) and the increase in business in Spain thanks to the rally in life-insurance in one of the companies in the sample.

Figure 3 shows the percentage of net turnover generated abroad for non-financial companies from 2007 to the first half of 2011 . This percentage rose in the first half of 2011 by 4.2 percentage points compared with the close of 2010 , up to $55.2 \%$.


Source: CNMV.

Table 1 shows the geographical distribution of the net turnover of non-financial companies by sector. As can be seen in this table, sales abroad continued gaining relative importance over the first half of 2011 in all businesses. The most significant
changes took place in the retail and services sector and the construction and real estate sector, which opted for increased internationalisation of their activity through corporate operations in response to the fall in domestic revenue.

| $l$ |
| :--- |
| Net turnover of listed non-financial companies: <br> percentage of net turnover from foreign operations |
|  |
|  |
|  |
| Energy |
| Manufacturing |
| Retail and services |
| Construction and real estate |
| Subtotal, non-financial companies |

Source: CNMV.

## 3 Profit/Loss

Figure 4 shows the year-on-year change in the aggregate profit/loss before tax for continuing operations ${ }^{7}$ since the first half of 2007. This figure shows how the first half of 2011 broke the upward trend in the profits of listed companies which had begun in the second half of 2009 .

Year-on-year rate of change of profit before tax


Source: CNMV.

This fall is partially a result of the fact that a significant part of the increase recorded in 2010 was due to accounting gains for a gross amount of 5,802 million euros

[^19]recorded by two companies in the sample which belong to the retail and services sector and the construction and real estate sector. These gains, which did not result in a cash inflow to the companies, were the result of corporate operations which involved a change in the level of significant influence in investee companies, and which involved the re-measurement at market prices of the retained or pre-existing shareholding in accordance with the new accounting standards applicable to these types of operations. ${ }^{8}$

The year-on-year rates of change for all sectors, except the construction and real estate sector, were lower than for the previous period. Furthermore, it should be noted that the energy and credit institution sectors moved into negative rates of change.

Table 2 shows the key margins of the income statement corresponding to the first halves of 2011 and 2010. This information shows that all the figures analysed developed positively in all sectors, except for the energy and credit institution sectors. However, the rates of change in the sectors with growth were lower than those seen in 2010.

EBITDA, ${ }^{1}$ operating profit/loss and profit/loss for the year
TABLE 2

| Million euros | EBITDA |  |  | Operating profit/loss |  |  | Profit/loss for the year |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1H2010 | Change |  | 1H2010 | Change |  | 1H2010 | 1H2011 | Change |
|  |  | 1H2011 | (\%) |  | 1H2011 | (\%) |  |  | (\%) |
| Energy | 16,044 | 15,545 | -3.1 | 10,767 | 10,265 | -4.7 | 6,796 | 6,129 | -9.8 |
| Manufacturing | 3,305 | 3,465 | 4.8 | 2,158 | 2,308 | 6.9 | 1,371 | 1,539 | 12.2 |
| Retail and services | 14,755 | 15,940 | 8.0 | 8,383 | 8,973 | 7.0 | 4,618 | 5,207 | 12.8 |
| Construction and real estate | 3,616 | 4,340 | 20.0 | 2,004 | 2,722 | 35.8 | -3 | 954 | - |
| Credit institutions | - | - | - | 12,323 | 10,610 | -13.9 | 12,225 | 10,237 | -14.3 |
| Insurance companies | - | - | - | - | - | - | 682 | 780 | 14.4 |
| TOTAL ${ }^{2}$ | $37,618^{3}$ | 39,204 ${ }^{3}$ | $4.2^{3}$ | $35,607{ }^{4}$ | $34,860{ }^{4}$ | $-2.14$ | 23,143 | 22,915 | -1.0 |

Source: CNMV.
1 EBITDA = Operating profit/loss + depreciation/amortisation of fixed assets.
2 For groups, the total only includes the consolidated data presented by the parent company, excluding any other listed company in the group. The total differs from the sum of the values shown for each sector as a result of the adjustments made.
3 Excluding credit institutions and insurance companies.
4 Excluding insurance companies.

8 In January 2008, the IASB published the revised IFRS 3 on business combinations, the revised IAS 27 on consolidated and separate financial statements, the revised IAS 28 on investments in associates and the revised IAS 31 on interests in joint ventures, applicable for financial years starting from 1 July 2009. This modification of the accounting standards involves substantial changes in the accounting registration of the acquisition or disposal of minority interests when control is held, and in the changes of interests which involve an increase or decrease in the level of significant influence. This may involve the registration of very significant results due to re-measurements of previous existing or residual held interests.

The number of companies presenting net losses fell compared with the previous year ( 37 companies in the first half of 2011 compared with 43 at the end of 2010). Similarly, the aggregate amount of annualised losses in the first half of 2011 fell by $38.6 \%$ compared with the end of 2010.

In terms of amount, the losses were mainly concentrated in the construction and real estate sector, in which the losses of 12 companies totalled 610 million euros, $67.9 \%$ of total losses. However, the highest number of loss-making companies belonged to the retail and services sector, in which 16 companies recorded total losses of 205 million euros.

By sector, the highlights are as follows:

- Energy. All the intermediate margins - EBITDA, operating profit, profit before tax and profit for the year - fell despite the growth in sales. EBITDA and operating profit fell by $3.1 \%$ and $4.7 \%$ respectively as a result of the increase in procurement costs resulting from: (i) the higher price of the energy acquired, (ii) the energy generation mix, as a result of the greater production of conventional thermal energy and reduced production of hydraulic and nuclear energy, and (iii) the fall in refinement margins. The profits before tax and profits for the year fell by $10.4 \%$ to $9.8 \%$ respectively. This was largely due to non-recurring operations carried out in the first half of 2010.
- Manufacturing. The results increased, although with rates of change which were significantly lower than those recorded in 2010 and with a very uneven performance among the different companies in the sector. EBITDA and operating profit grew by $4.8 \%$ and $6.9 \%$ respectively, below the increase in sales, with companies which improved their margins as a result of cost contention policies or through having taken advantage of the synergies generated in corporate operations. However, some companies saw worsening margins as a result of unchanged cost structures, despite the falling sales, or as a result of having recorded impairment or non-recurring expenses.

Nevertheless, profits before tax and profits for the year rose by $13.6 \%$ and $12.2 \%$ respectively, as a result of the gains generated through the disposal of shareholdings.

- Retail and services. EBITDA and operating profit rose by $8 \%$ and $7 \%$ respectively, rates which were lower than the growth in sales, not only as a result of the increase in procurement costs, but also due to the increase in personnel costs resulting from regularisations and restructuring. Similarly, depreciation/ amortisation costs rose by $9.4 \%$ as a result of the effects of the changes in the consolidation scope in the previous year.

However, profit before tax only rose $4.5 \%$ as a result of: (i) the increase in financial expenses owing to the change in interest rates and the effects of refinancings and (ii) the fall in profits from companies recorded using the equity method. On the other hand, it is important to point out the positive effect of the changes in interest rates and the increase in the results obtained from the disposal of financial instruments.

Finally, net profit rose by $12.4 \%$, a higher percentage than the change in the profit before tax, owing to the results generated from discontinued operations in the first half of 2011.

- Construction and real estate. This was the only sector with positive growth rates in double digits or more despite the fall in revenue. However, performance was uneven between construction companies and real estate companies. The EBITDA of construction companies rose by $19 \%$ as a result of the gains obtained through asset disposal. If we exclude the effect of these nonrecurring operations, EBITDA would have grown by $3.3 \%$. The rates of change of the profit before tax and for the year were $148 \%$ and $151 \%$ respectively as a result of the gains obtained through the sale of shareholdings. However, EBITDA of the real estate sub-sector was negative, although slightly less than for the first half of 2010. Nevertheless, the EBITDA of some companies fell significantly as a result of impairment, while that of others improved as a result of revaluations of their rented assets in France or because in previous periods they had sold real estate assets to financial institutions with negative margins. Despite the growth in EBITDA and the increase in the results from companies recorded using the equity method, profit before tax fell by $7.1 \%$ due to the fall in financial revenue as a result of write-offs.
- Credit institutions. Liquidity tensions in markets quickly led to an increase in the rates offered for deposits in the first half of the year, which in turn increased financing costs. This, together with the increase in risk premiums for wholesale financing issues, led to a $2.7 \%$ fall in the aggregate interest margins for credit institutions. Despite the increase in net commissions and the favourable performance of exchange rates, which made it possible to partially offset the negative trend of the interest margin, the increased impairment losses and personnel expenses had a negative impact on the operating profit, which fell by $13.9 \%$. The impairment of other assets (mainly awarded real estate assets) further increased the fall in the profit before tax to $16.3 \%$.

As a result of the increasing general expenses and lower margins, efficiency ratios of banks and savings banks worsened and stood at $41 \%$ and $45.9 \%$ respectively as of June 2011, compared with $37.8 \%$ and $41.2 \%$ in June 2010.

- Insurance companies. Net profit for the period rose by $14.4 \%$, mainly due to the positive development of the results of the business, with increases in premiums greater than the increase in claims. Distribution and joint venture agreements carried out by one of the companies in the sample made it possible to increase premiums by $38 \%$ in Brazil ( $20 \%$ in America as a whole), which partially explains the sector's positive performance.


## 4 Return on equity and return on investment

Figure 5 shows the trend for return on equity (ROE) and return on investment (ROI) ${ }^{9}$ since 2007. As can be seen, ROE in the first half of 2011 fell compared with the end of 2010, while ROI increased slightly. Both ratios showed similar values to those at the close of 2009 .


Source: CNMV.
Tables 3 and 4 show the trend of ROE and ROI for the different sectors. The energy, retail and services, and construction and real estate sectors saw worsening ratios compared with the end of the previous year. The ROE of the manufacturing sector fell and its ROI remained stable, while the ROE of the credit institutions and insurance sector remained stable and its ROI rose thanks to the positive performance of the insurance sub-sector.

| ROE |  |  |  |  | TABLE 3 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| \% | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{1 H 2 0 1 1}$ |
| Energy | 15.9 | 19.5 | 13.2 | 16.2 | 12.3 |
| Manufacturing | 17.7 | 10.6 | 6.3 | 13.8 | 11.8 |
| Retail and services | 32.4 | 20.1 | 19.3 | 21.9 | 18.2 |
| Construction and real estate | 18.3 | $\mathbf{- 1 7 . 6}$ | 3.7 | 6.6 | 6.2 |
| Credit institutions and insurance companies | 19.1 | 13.0 | 10.4 | 10.3 | 10.4 |
| TOTAL | $\mathbf{1 9 . 7}$ | $\mathbf{1 2 . 4}$ | $\mathbf{1 1 . 7}$ | $\mathbf{1 3 . 6}$ | $\mathbf{1 1 . 9}$ |

Source: CNMV.

9 For the definition of ROE and ROI used in this article, see De Anta Montero, B. and Casado Galán, Ó. (2009). "Economic and financial performance of listed companies in the first half of 2009". CNMV Bulletin, Quarter IV, pp. 41-58. Available at http://www.cnmv.es/DocPortal/Publicaciones/Boletin/BulletinQIV_ weben.pdf.

ROI

| \% | 2007 | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{1 H} 2011$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Energy | 9.1 | 10.5 | 7.2 | 9.1 | 7.9 |
| Manufacturing | 11.5 | 7.7 | 4.9 | 9.1 | 9.2 |
| Retail and services | 12.1 | 8.3 | 7.7 | 9.4 | 7.5 |
| Construction and real estate | 7.8 | 0.4 | 3.2 | 4.5 | 3.7 |
| Credit institutions and insurance companies | 3.8 | 3.8 | 2.5 | 2.0 | 2.3 |
| TOTAL | 4.8 | 3.9 | $\mathbf{2 . 9}$ | $\mathbf{2 . 7}$ | $\mathbf{3 . 0}$ |

Source: CNMV.

The fall in ROE in the first half of 2011 was the result of a $13.7 \%$ drop in the annualised profit with regard to the 2010 profit, partly due to the gains generated in the second half of 2010 as a result of corporate operations which involved an increase or decrease in the level of significant influence, and which involved the re-measurement at market prices of the retained or pre-existing shareholding. If we adjust the result of the second half of 2010 for the aforementioned operations, ROE would stand at $12.6 \%$.

## 5 Debt

Figure 6 shows the trend of gross financial debt ${ }^{10}$ for the non-financial companies in the sample.

Debt structure and leverage ratio of non-financial listed companies


Source: CNMV.

At the end of the first half of 2011, gross financial debt totalled 313,051 million euros, slightly down on the total recorded in 2010 ( 326,769 million euros). The percentage

[^20]of short-term debt fell slightly compared with 2010, and stood at $20.2 \%$ of the total in the first half of 2011 ( $21.9 \%$ in 2010).

The fall compared with the end of 2010 is due to the fact that two companies, with a significant joint level of debt, one from the energy sector and another from the retail sector, no longer form part of the sample. If we exclude these companies in 2010, the level of debt would have remained stable. However, it is important to point out that the increase in debt of one manufacturing company and one construction company, as a result of business combinations carried out in the first half of 2011, offset the widespread fall in leverage.

The aggregate leverage ratio, which compares the debt to equity, was 1.46 in the first half of 2011, compared with 1.43 at the end of 2010.

Figure 7 shows the trend in debt-to-EBITDA and the debt service coverage ratios. The ratio of total debt/EBITDA, which measures the number of years necessary to pay the debt taken on if EBITDA remains constant, worsened slightly in the first half of 2011 compared with 2010, but did not reach the levels of 2008 and 2009, and stood at 3.99 years ( 3.84 years in 2010). The debt service coverage ratio (EBIT/financial expenses) fell to 2.7 times ( 3.12 times in 2010). The worsening of both ratios was due to the fall in annualised profits of the first half of 2011 compared with the profits generated in 2010.

Coverage ratios
FIGURE 7


Source: CNMV.
Table 5 shows the trend in the level of debt and the key related ratios by sector.

The energy sector continued to reduce its level of debt through debt amortisations thanks to the use of the amount collected with the placements of the electricity tariff deficit carried out by the Electricity Deficit Amortisation Fund (Spanish acronym: FADE). Despite the fall in the sector's debt, the debt/EBITDA ratio and the debt service coverage ratio worsened as a result in the fall in profits.

Increasing debt in the manufacturing sector was the result of the funding obtained for a business combination.

Trend of debt by sector
TABLE 5

| Million euros |  | 2007 | 2008 | 2009 | 2010 | 1H2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Energy | Debt | 69,172 | 82,608 | 100,572 | 98,283 | 90,815 |
|  | Debt / equity | 0.78 | 0.89 | 1.08 | 0.95 | 0.90 |
|  | Debt / EBITDA | 2.48 | 2.82 | 3.46 | 2.81 | 2.83 |
|  | Operating profit / debt service cost | 4.10 | 3.67 | 3.38 | 4.15 | 3.98 |
| Manufacturing | Debt | 13,312 | 15,645 | 15,953 | 14,948 | 17,830 |
|  | Debt / equity | 0.61 | 0.69 | 0.69 | 0.58 | 0.67 |
|  | Debt / EBITDA | 1.82 | 2.71 | 3.05 | 2.11 | 2.70 |
|  | Operating profit / debt service cost | 5.93 | 3.41 | 3.15 | 5.00 | 4.27 |
| Retail and services | Debt | 96,941 | 112,322 | 108,579 | 115,413 | 104,471 |
|  | Debt / equity | 1.70 | 2.14 | 1.78 | 1.60 | 1.90 |
|  | Debt / EBITDA | 3.01 | 3.58 | 3.70 | 3.38 | 3.54 |
|  | Operating profit / debt service cost | 3.23 | 2.86 | 3.28 | 3.94 | 2.79 |
| Construction and real estate | Debt | 138,933 | 119,788 | 104,762 | 99,917 | 101,605 |
|  | Debt / equity | 3.08 | 3.77 | 4.08 | 3.42 | 3.08 |
|  | Debt / EBITDA | 10.83 | 31.87 | 22.48 | 11.18 | 14.05 |
|  | Operating profit / debt service cost | 1.17 | 0.01 | 0.31 | 0.98 | 0.72 |
| Adjustments* |  | -17,391 | -20,802 | -1,908 | -1,792 | -1,670 |
| TOTAL | Debt | 300,967 | 309,561 | 327,958 | 326,769 | 313,051 |
|  | Debt / equity | 1.48 | 1.63 | 1.63 | 1.43 | 1.46 |
|  | Debt / EBITDA | 3.96 | 4.63 | 4.82 | 3.84 | 3.99 |
|  | Operating profit / debt service cost | 3.03 | 2.01 | 2.42 | 3.12 | 2.70 |

Source: CNMV.

* In the adjustment row the data on issuers that are subsidiaries of another listed company belonging to a different sector are eliminated.

The debt of the retail and services sector fell as a result of one company with a significant level of debt no longer forming part of the sample in the first half of 2011. If we exclude this company, the leverage ratio would have worsened as a result of the fall in equity due to dividends paid in the first half of 2011.

In the first half of 2011, the construction and real estate sector once again increased its debt levels slightly as result of the business combinations carried out. However, the leverage ratio improved as a result of the increase in equity following the first consolidation of new companies and the capital increases for loan compensation carried out within the framework of debt refinancings. The sector's ratios showed greater levels of financial risk, with figures very different from those of other sectors.

## 6 Delinquency and solvency of credit institutions

Given the particular situation undergone by the financial sector and the restructuring processes which took place in the first half of 2011, it is important to include a
specific section on the performance of credit institutions and, in particular, on their ratios regarding growth in lending, delinquency and solvency.

The aggregate rate of change in lending became negative ( $-0.1 \%$ ), following the slight growth in recent six-month periods, as a consequence of several downward pressures, which include the worsening funding conditions for credit institutions, a greater level of risk aversion when accepting operations and an increase in asset write-offs as a result of a higher number of defaulting loans.

The figure below shows the delinquency ratio of credit institutions in lending to other resident sectors (families and non-financial corporations) from 2007 to the first half of 2011.

Delinquency ratio of credit institutions
FIGURE 8


Source: Bank of Spain.
The upward trend in delinquency which began in 2007 continued in the first half of 2011. This negative trend, in line with the main macroeconomic figures and, in particular, the increasing unemployment rate, which reached $20.9 \%$ in June, was exacerbated by the exposure of credit institutions to the construction and real estate development sector. The increase in doubtful assets in the half-year was significant, $10 \%$ up $^{11}$ on December 2010 ( $5.5 \%$ from June to September 2011), which together with the fall in lending, explains the growth in the delinquency rate being higher than that of the previous half-year.

The increase in delinquency since the second half of 2007 has remained in line with the increase in the volume of refinancings and acquisitions or asset assignments, especially in the real estate sector. Assets received as payment of debts are generally classified in the balance sheets of financial groups under the heading of non-current assets for sale, with the exception of developments in progress and leased assets, which are classified under other asset headings (inventory and property, plant and equipment and real estate investments respectively). The positive rates of change in non-current assets for sale, tangible assets and other assets calculated in the first half of 2011 totalled $9.9 \%, 8.7 \%$ and $7.3 \%$ respectively compared with the end of 2010.

[^21]The credit risk coverage rate ${ }^{12}$ stood at $62.3 \% ~(77.14 \%$ as at September 2011), $8 \%$ down on December 2010 and similar to the level in June 2010. The efforts being made by credit institutions to allocate provisions have made it possible to stabilise the coverage ratios between $60 \%$ and $75 \%$ since December 2008. ${ }^{13}$

Equity as of June 2011 was $1.2 \%$ up on December 2010 as a result of the capital strengthening policy in response to the general economic situation, including the capitalisation requirements established in Royal Decree-Law 2/2011, of 18 February, for strengthening the financial system, which, irrespective of the possible extensions for those institutions carrying out restructuring (the general deadline for meeting the requirements contained in the aforementioned regulation was 30 September 2011), requires a minimum level of core capital ${ }^{14}$ of $8 \%$ in total risk weighted exposures, or $10 \%$ for those credit institutions which have a wholesale funding ratio greater than $20 \%$ in accordance with the definition established by the Bank of Spain and which have not distributed equity instruments or voting rights for a percentage equal to or greater than $20 \%$ of the equity to third parties, including shareholders or members. ${ }^{15}$

The components of equity changed as follows: (i) own funds rose by $2.6 \%$ in the first half year, (ii) valuation adjustments remained negative and increased by $184 \%$, mainly as a result of the fall in the prices of assets available for sale, and (iii) minority interests rose by $24.4 \%$.

The ratio of equity over total assets remained unchanged over the first half of 2011 at $6.6 \%$.

Finally, in July 2011, the results of the stress tests performed on different European financial institutions were published. Of the 25 Spanish institutions subject to the test, five did not pass, although all of them exceeded the required ratio ( $5 \%$ ) once generic provisions were included in the calculation of the benchmark ratio. ${ }^{16}$

## 7 Cash flows

Figure 9 shows the aggregate changes in cash flows generated in the first halves of 2010 and 2011 by the companies in our sample, distinguishing between flows arising from operations, investment and financing, with the totals corresponding to the changes in cash and cash equivalents over the period. In addition, non-financial institutions are separated from credit institutions and insurance companies given the different nature of their activities.

[^22]

Source: CNMV.

The sector-by-sector development of cash flows is analysed below:

- Non-financial institutions. In aggregate terms, cash flows generated in operating activities rose by $2.6 \%$ ( 651 million euros) compared with the same period of the previous year. The flows generated were used to carry out: (i) net investments of 12,989 million euros, (ii) payments for financing of 11,509 million euros, and (iii) increasing the balance of cash and cash equivalents by 475 million euros. Exchange differences totalled 100 million euros. Investments for the period totalled 29,496 million euros, which were partially offset by the significant increase in divestments in the energy sector ( 12,988 million euros). Outflows for financing activities increased significantly by 4,163 million euros, largely due to the increase in dividends paid in the period ( 2,309 million euros).
- Credit institutions and insurance companies. The lack of liquidity in financial markets has led to credit institutions making additional efforts to increase cash and cash equivalents accounts. Accordingly, at the end of the first half of 2011, the cash flow statement of credit institutions as a whole recorded a net increase in cash and cash equivalents of 13,189 million euros, $12.4 \%$ up on the end of the first half of 2010.

Operating activities generated flows for a value of 36,790 million euros, which were reduced by investment activities and cancellation of liabilities, including the significant payments made by one institution in the purchase of institutions abroad.

Insurance companies, despite the good performance of flows from operations, which increased by 403 million euros over the half-year period, reduced their cash accounts by 261 million euros as a result of the greater payments made in investment and financing activities. In this regard, it is important to point out
the purchase by one insurance company of the holding which a financial institution had in another insurance company.

## 8 Number of employees

Table 6 shows the average and aggregate workforce for the six sectors analysed in the first halves of 2011 and 2010, with an $8 \%$ year-on-year increase in average workforce.
Average workforce by sector TABLE6

|  | $\mathbf{1 H 2 0 1 0}$ | $\mathbf{1 H 2 0 1 1}$ | \% change |
| :--- | ---: | ---: | ---: |
| Energy | 121,437 | 121,877 | 0.4 |
| Manufacturing | 240,432 | 254,524 | 5.9 |
| Retail and services | 657,841 | 713,788 | 8.5 |
| Construction and real estate | 361,405 | 411,114 | 13.8 |
| Credit institutions | 347,480 | 367,298 | 5.7 |
| Insurance companies | 40,922 | 42,317 | $\mathbf{3 . 4}$ |
| Adjustments* | $-4,071$ | $-3,840$ | -5.7 |
| TOTAL | $\mathbf{1 , 7 6 5 , 4 4 6}$ | $\mathbf{1 , 9 0 7 , 0 7 8}$ | $\mathbf{8 . 0}$ |

Source: CNMV.

* In the adjustment row, the data on issuers that are subsidiaries of another listed company belonging to a different sector are eliminated.

The average workforce increased in all sectors, and to a greater extent in the construction and real estate sector and the retail and services sector, mainly as a result of growth outside Spain due to corporate operations.

The aggregate average workforce of credit institutions recorded in the first half of 2011 rose by $5.7 \%$ compared with the same period of the previous year, mainly due to the acquisition of institutions abroad. The average annualised cost per employee increased by $4.6 \%$ compared with the previous period ( 56,000 euros compared with 53,000 euros in 2010) mainly as a result of the increase in personnel expenses for early retirement in institutions which are closing branches or undergoing restructuring plans. In this context, the number of branches fell by $2.1 \%$ over the period.

On an aggregate level, the annualised average cost per employee totalled approximately 37.2 thousand euros in the first half of 2011, compared with 37.4 thousand euros in the same period of the previous year.

## 9 Dividends

Dividends paid in the first half of 2011 totalled 10,776 million euros. Table 7 shows the dividends paid in the first halves of 2011 and 2010 by sector.

|  | $\mathbf{1 H 2 0 1 0}$ | $\mathbf{1 H 2 0 1 1}$ | \% change |
| :--- | ---: | ---: | ---: |
| Energy | 927 | 1,579 | 70.3 |
| Manufacturing | 604 | 813 | 34.6 |
| Retail and services | 3,507 | 4,620 | 31.7 |
| Construction and real estate | 508 | 757 | 49.0 |
| Credit institutions | 3,634 | 2,714 | $\mathbf{- 2 5 . 3}$ |
| Insurance companies | 271 | 292 | $\mathbf{7 . 7}$ |
| Adjustments* | -13 | 1 | - |
| TOTAL | $\mathbf{9 , 4 3 8}$ | $\mathbf{1 0 , 7 7 6}$ | $\mathbf{1 4 . 2}$ |

Source: CNMV.

* In the adjustment row, the data on issuers that are subsidiaries of another listed company belonging to a different sector are eliminated.

In aggregate terms, total dividends paid by listed companies increased by $14.2 \%$. Only the credit institution sector reduced the dividends paid compared with the same period of the previous year, as part of the remuneration was distributed using paid-up shares.

It is important to point out the increases in the following sectors: (i) energy, as a result of the different time pattern of the payment of dividends of one company with a significant weight in the sample, and (ii) retail and services, as a result of the payment of dividends against reserves and the payment of gains generated from the sale of shareholdings in the first half of 2011.

## 10 Conclusions

The aggregate net profit of listed companies as a whole in the first half of 2011 fell by $1 \%$ compared with the same period of the previous year, thus reversing the upward trend of 2010 . This change was the result of the negative performance of the credit institutions and energy sectors, which recorded negative growth rates.

The growth rate of the aggregate net profit of non-financial companies decreased by 30 percentage points in the first half of 2011 compared with the second half of 2010, down to $8.3 \%$. We should highlight (i) the negative growth rate of the energy sector as a result of non-recurring operations $(-9.8 \%$, after a growth rate of $38 \%$ in the second half of 2010), (ii) the fall in the growth rates in the manufacturing sector and retail and services sector, and (iii) the change in the construction and real estate sector, which went from recording losses to recording profits, driven by the construction sector, thanks to the gains obtained with the disposal of assets and share -holdings.

The profits of credit institutions, which were $14.3 \%$ down on the first half of 2010, continued to be dependent on the provisions for delinquency, asset impairment losses, intensification of the competition in acquiring liabilities and the difficulties in accessing funding and wholesale markets.

In the first half of 2011, non-financial companies have generated practically no cash flows due to investments and the increase in dividends paid, despite the divestments made and the operating flows generated. In this context, the level of debt remained constant with an across-the-board fall in the level of leverage, offset by the funding obtained in order to carry out specific corporate operations.

Credit institutions, however, increased their cash flows as result of the increase in interest rates, the contraction of lending and the policy of paying dividends with shares. In particular, the latter led to a $1.2 \%$ increase in the equity of credit institutions compared with the end of 2010 . However, the ongoing increases in the delinquency ratio and a volume of awards and dation in payment reflect the difficulties which credit institutions face due to the weakness in general economic activity.

# Exchange-traded funds: features and recent developments 

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## 1 Introduction

The first exchange-traded funds (ETF) appeared in Canada in 1990. Since then, according to data from the investment management corporation BlackRock, the assets managed by these funds have grown at an average annual rate of $40 \%$, up to 1.4 trillion dollars in the first half of $2011,{ }^{1}$ grouped into around 2,800 funds. ETF are present in over 40 secondary markets throughout the world. In particular, a total of 69 ETF are listed in a specific segment of Spanish stock markets, Bolsas y Mercados Españoles (BME). Together with the growth in the assets under management and the number of funds, there has also been an increase in the variety of benchmark assets, which have moved increasingly from being mainly focused on major stock market indexes to including assets with relatively low liquidity. In addition, the financial structure used to replicate the returns of the benchmark assets has changed and now often includes OTC derivative contracts.

The rapid expansion of these products has been based on a series of clear advantages for investors, some of which are specific for ETF and some, to other investment products. These funds allow investors to access multiple assets, using relatively sophisticated strategies, with target returns which are explicitly established through benchmark indexes and through relatively simple and economical acquisition and sale procedures.

The growth of the sector and the changes in the design of their asset portfolios, in particular the growing use of complex structures, has attracted increasing attention from different international bodies and regulatory authorities which are interested in the possible implications on financial stability. For example, the Financial Stability Board (hereinafter, FSB) published a document in April $2011^{2}$ in which it stated that the recent wave of financial innovations in the ETF market require close monitoring of potential risks by supervisors. However, it should be pointed out that these potential effects are not exclusive to exchange-traded funds as they may also be associated with other funds and investment vehicles which use OTC derivatives.

Other aspects regarding ETF more directly relating to investor protection and users of financial services have also generated considerable interest from regulators. In particular, it is important to point out the growing attention paid to the retail distribution of exchange-traded funds with complex structures, as well as the possible effects of the expansion of exchange-traded funds on the price formation of the benchmark securities.

[^23]This article offers a description of these types of funds and their potential risks, both with a financial stability perspective and investor protective scope. With this aim, the article is organised as follows. Section 2 describes the essential aspects of these products and their financial structures. Section 3 analyses the potential risks for investor protection and the stability and ordinary functioning of financial markets, as well as current discussions on improvements in supervision. The conclusions are presented in section 4 . The article is accompanied by an annex which briefly analyses the tracking error on replicated indexes, a strategy offered by most ETF, with data on its impact on the funds traded in Spain.

## 2 Basic features of ETF

ETF are investment funds with the main distinguishing characteristic that their units are traded on secondary markets. Unlike the units in traditional funds, which can only be subscribed or redeemed at their net asset value ${ }^{3}$ (which must be calculated following the close of the session), the units of ETF are bought and sold on the secondary market. Exchange-traded funds appeared in Spain for the first time in 2006 and were traded in a specific segment of BME.

Exchange-traded funds allow investment in a wide range of assets which are often difficult to access for investors, especially retail investors, such as indexes, commodities and emerging markets. They therefore offer the advantages of diversification typical of investment funds. In addition, their listing on secondary markets allows investors that are used to operating in these markets to take and dispose positions in a similar way to other listed assets, such as company shares and bonds.

Another of the advantages of ETF which appeals to investors is that the investment strategy is generally based on passively tracking benchmark indexes and, therefore, is relatively inexpensive. In principle, this tracking allows the institutional retail investor to take or hedge positions in different markets and at the same time it establishes a clear reference framework on the fund's investment policy.

These characteristics have generated significant demand for this type of product. Figure 1 shows that the number of ETF and their assets under management have grown exponentially over the last decade. Furthermore, the composition of their portfolio has changed significantly over the period. The portfolio was originally almost totally limited to equity investment, while at the close of the first half of 2011 equity accounted for $80.2 \%$ of the assets, fixed income accounted for $16.2 \%$, and commodities accounted for $3.6 \%$.

Exchange-traded funds are usually indexed i.e. their investment strategy typically tracks the performance of a benchmark index (for example, Ibex 35). There are also so-called "inverse" exchange-traded funds, which replicate the opposite change in the benchmark index so that their return is positive when the index loses value

[^24]and negative when the index gains value. Therefore, investment in inverse ex-change-traded funds is equivalent to holding short positions in the benchmark indexes.


Source: BlackRock, EFT Landscape. H1-2011.
With regard to the investor profile of these products, there are differences between Europe and the United States. According to data from the investment management company BlackRock, ${ }^{4}$ in Europe $80 \%$ of the assets managed by exchange-traded funds belong to institutional clients, while in the United States these clients, mostly hedge funds, account for half of the market, with the other half taken by retail investors. In Europe, most exchange-traded funds meet the requirements of Directive 2009/65/EC, of the European Parliament and of the Council, on undertakings for collective investment in transferable securities (UCITS), which allows them to be marketed within EU Member States as non-complex products. According to data from Deutsche Bank, ${ }^{5}$ providers in Europe are highly concentrated, with six providers accounting for $80 \%$ of the assets under management of exchange-traded funds.

In order to carry out their investment strategy, the funds may directly take positions in the assets which make up their benchmark index or do so by holding derivatives contracts with other entities. Both mechanisms are described in detail below.

### 2.1 Physical exchange-traded funds

At first, providers replicated the performance of the fund's benchmark index by buying the shares making up the index in the same proportion as they appeared in

[^25]the index. This type of exchange-traded fund is known as a "physical" fund, as the benchmark shares/assets are registered in the name of the provider. The cost of replicating the index by buying all the assets which make up the index is greater in those with a large number of assets and which include securities with a low level of liquidity. In order to reduce the cost of replication, some funds began to use statistical techniques to select a basket of index constituent assets instead of the full amount of the shares so as to achieve a high level of correlation with the index and at the same time reduce the transaction and maintenance costs of a high number of assets.

Therefore, one of the risks which investors in physical funds must bear in mind is the possibility that the chosen asset portfolio does not exactly replicate the performance of the benchmark index, thus exposing the unit-holders to tracking errors, which are analysed briefly in the annex with an example of a case in Spain. This tracking error may lead to final investors suffering an unforeseen market risk in their portfolio.

### 2.2 Synthetic exchange-traded funds

Over time, providers have developed new structures to replicate the return of the benchmark indexes so as to reduce the transaction costs associated with the practice of acquiring multiple assets and to reduce the tracking error associated with an imperfect correlation between the fund's portfolio and the index. The development of new replication strategies has led to so-called "synthetic funds", whose main feature is the use of OTC derivatives, which provide the return of the benchmark index.

A typical investment strategy is that in which the provider agrees a total return swap with a counterparty, typically a financial institution. This derivative allows the provider to receive the returns of the reference index in exchange for the payment of a periodic fee to the counterparty. In addition, the fund gives the counterparty assets in cash, and the counterparty gives collateral assets in return. A key aspect which will be analysed later on is precisely the type and quality of the assets given as collateral by the financial institution.

Synthetic exchange-traded funds have had greater development in Europe (around 110 billion dollars under management in September 2011) ${ }^{6}$ than in the United States, where the legislation is more restrictive with regard to the use of derivative instruments by collective investment schemes (CIS). Specifically, in the United States, in accordance with the Investment Company Act, companies must maintain at least $80 \%$ of their investment in assets described by the fund's name. In Europe, legislation allows investment in OTC derivatives provided they meet the following requirements: i) the fund's exposure may not exceed $100 \%$ of its assets (i.e. leverage is limited), ii) counterparty risk with one single entity is limited to $10 \%$ of the assets, and iii) the premiums paid for options may not exceed $10 \%$ of the value of the fund's assets.

[^26]Within the category of synthetic exchange-traded funds, we can find "leveraged funds", which offer returns which are two or three times higher than those of the benchmark index. There are also inverse funds with leverage with double or triple the return of the benchmark index. This type of fund must normally be considered as a complex financial instrument as the return structure and the use of derivatives to achieve it involves risks which are difficult for investors to take on and understand.

Synthetic funds reduce or eliminate the replication risk of the index, transferring the possibility of it materialising to the counterparty which offers the derivative. However, in exchange the investor takes on a credit risk associated with the counterparty of the derivative instrument. Use of OTC derivatives by these structured funds therefore involves the same potential risks detected for the OTC market as a whole and, therefore, should be subject to the G-2o recommendations and reforms in progress in the context of international financial reforms.

Key differences between physical and structured exchange-traded funds TABLE 1

|  | Physical exchange-traded funds | Structured exchange-traded funds |
| :---: | :---: | :---: |
| Investment strategy | - Replication through asset purchases | - Replication through swaps so as to receive the index's returns (+/-) |
| Counterparty risk | - Those resulting directly from investment in assets or possible securities lending | - With the counterparty of the swap <br> - According to UCITS Directive, limited to $10 \%$ of the assets |
| Collateral | - The fund owns the index's securities | - The counterparty of the swap deposits assets for at least $90 \%$ of the fund's current value |
| Returns | - Subject to tracking errors if the portfolio is different from the benchmark index | - Counterparty of the swap guarantees the returns of the index |

## 3 Potential risks of ETF

As with any other listed asset, or assets linked to listed assets, the unit-holders in this type of fund are subject to market risk. In this case, the tracking risk associated with the index replication strategies is particularly important given that, as indicated above, most ETF offer investment policies of this type. Consequently, retail or institutional investors that wish to invest in exchange-traded funds with the aim of obtaining the return of a specific index, whether this is in order to take the direct position or to hedge against other risks in their portfolio, may find themselves in situations in which the return received is different from that expected. In order to draw the attention of investors to market risks, it is essential to maintain and, as far as possible, improve the levels of transparency currently required with regard to the information providers give to investors.

However, the interest raised by ETF over recent months among economic authorities and international forums related to the regulation and supervision of financial
markets is mainly down to the intense growth in the assets under management, the use of increasingly complex structures with derivatives so as to achieve the return of the benchmark assets and the increasing use by retail investors, especially in the U.S. market. This interest is mainly focused on the mechanisms for improving investor protection and in the area of financial stability.

Two documents from the Bank for International Settlements (BIS) and the Financial Stability Board (FSB) in the first half of $2011^{7}$ and another more recent one from the European Systemic Risk Board (ESRB) ${ }^{8}$ focus on the second issue, highlighting the potential systemic risks of exchange-traded funds. The three institutions focus on the counterparty risk incurred by the funds and the assets used as collateral in derivative contracts.

Irrespective of the systemic perspective, the possibility of marketing complex structures with potentially significant counterparty risks among retail investors requires regulation and supervision of the marketing practices of these products so as to guarantee a suitable level of investor protection. The problems in the area of retail investor protection are accentuated by the possibility of significant conflicts of interest between the providers of funds and the entities of the financial group to which they belong given that the latter may obtain funding from these investment vehicles by placing selling assets with a low level of liquidity.

A different type of risk is the generation of possible disturbances in the markets of some assets in which these funds invest as a result of them performing transactions unrelated to the economic and financial situation of these assets. The potential to influence prices is greater in the case of funds with a high volume of assets or leverage and in those which use the prices of commodities or assets with low liquidity as their benchmark. ${ }^{9}$

These risks are analysed in greater detail below.

### 3.1 Complexity and retail distribution

Providers have progressively extended the range of exchange-traded funds. They initially only offered simple structures for replicating well-known stock market indexes, but funds are now marketed with more complex structures, such as inverse funds, which involve taking on short positions in the assets, or leveraged funds, which involve price changes which multiply the risk of the original index.

The funds authorised in accordance with Directive 2009/65/EC (UCITS IV) are considered non-complex products and hence may be marketed to retail investors with-

[^27]out the investor being subjected to the appropriateness test. ${ }^{10}$ Therefore, in practice, current legislation allows exchange-traded funds with potentially complex structures which involve OTC derivatives to be marketed to retail investors.

However, the complexity and risks associated with structured funds mean that this type of product should be under the category of complex financial products and their marketing should be fixed and limited to those investors with knowledge and experience which match the risk profile of these collective investment vehicles. The CESR, in a response to the European Commission of July 2010 on the proposal for modifying the MiFID Directive, ${ }^{11}$ considered that structured exchange-traded funds should be considered as complex financial instruments for the purposes of the appropriateness test. In addition, the CESR proposed strengthening the rights of customers to request information on the fund's risk profile under certain market conditions, as well as an independent quarterly assessment of the structures. In this regard, the CESR - with the aim of protecting investors and maintaining market integrity and the reputation of collective investment schemes - did not rule out the possibility of issuing warnings and even banning the distribution of funds of these characteristics among retail investors.

In the United Kingdom, leveraged exchange-traded funds, complex funds and those which replicate hedge funds are only suitable for marketing among those investors that can understand their risks, with investment firms being responsible for verifying this.

### 3.2 Counterparty risk

The trend towards greater complexity in the structures used by ETF to replicate the return of the benchmark assets may bring about the appearance of potential risks for investors with possible systemic consequences. In particular, this sector may be subject to some of the problems seen in other markets, such as in some securitisation segments, where the lack of transparency and the complexity of the structures make accurate risk evaluation difficult. This type of complex structure has become deeply entrenched in Europe, where, according to the FSB report mentioned in section 1, they account for $45 \%$ of the assets under management of exchange-traded funds, with significant growth since 2005. Similarly, a large part of the risks for the market detected in the OTC derivatives segments could, in theory, be reproduced in the more complex structures of exchange-traded funds and therefore the regulatory solutions in progress should also be applied to these funds.

The counterparty risk of exchange-traded funds affects those ETF which use OTC derivatives, such as swaps, to synthetically replicate the return of the benchmark assets. In these cases, the fund's provider enters into a derivative contract with a financial institution through which it ensures the return of the benchmark assets. The provider uses this structure to eliminate tracking errors, but incurs credit risk with regard to its counterparty. In the event that the counterparty to the derivative contract fails to

[^28]meets its obligations, the provider would not be able to directly replicate the return of the benchmark assets and would be left with the assets deposited by the counterparty as collateral. This becomes more likely the more these assets have a low correlation with the benchmark index and have a relatively low level of liquidity. In an extreme case, the fund's provider could be forced to limit the redemptions as the liquidity of its portfolio would be reduced and difficulties might arise in accurately valuing it.

As stated in the BIS report, ${ }^{12}$ there is also an additional risk of failure to comply as a result of bankruptcy of the financial counterparty as the bankruptcy receiver could decide to freeze the assets held in the customers' accounts, which would include those of the exchange-traded fund. In this case, the assets of the exchange--traded fund would be blocked while the bankruptcy procedures continue and investors could not redeem their units.

The problem of counterparty risk does not only exist in structured or synthetic ETF. Other investment funds, whether ETF or not, also use OTC derivative instruments so as to guarantee a return or to hedge against the market risk and/or credit risk of their portfolios. Financial instruments such as warrants, certificates, contracts for differences, interest-rate swaps and repos are relatively common in the portfolios of collective investment schemes. This risk also exists when a fund performs securities lending. It is a common practice for these funds to mobilise their portfolios by temporarily lending the assets in exchange for a fee which provides them with an additional return.

These risks are, however, limited by current legislation. In Europe, the UCITS Directive, which European ETF are subject to, limits exposure to one counterparty to $10 \%$ of the assets ${ }^{13}$ (which would also include all the securities issued by the same issuer), thus limiting the fund's potential risk. In addition, the above Directive requires that funds which carry out security lending maintain collateral for $100 \%$ of the operations and that these are updated daily. In addition ESMA is fostering a legislative change which, if approved, would require exchange-traded funds to inform unitholders of any intention to carry out securities lending with the securities in the portfolio and, in addition, to disclose the fees which this activity may generate.

The FSB report also indicates possible conflicts of interest in the case in which the fund's provider and the counterparty of the derivative belong to the same financial group.

One alternative which would be helpful for mitigating counterparty risk would be to require a daily adjustment of positions in OTC derivatives so as to limit the effects of any default. This would involve using one of the most common practices in organised derivatives markets, with daily margining and settlement of profit and losses. These practices are consistent with the reform of infrastructures of OTC derivatives markets initiated in the United States and Europe in accordance with the G-20 recommendations in the framework of international financial reforms.

[^29]
### 3.3 Financing risk of financial counterparties

The ESRB in response to an enquiry by ESMA ${ }^{14}$ highlights the connection between the banking system and the exchange-traded fund sector resulting from the significant role played by the former in synthetic funds. The credit institutions which act as counterparty to OTC derivatives contracts used by ETF deposit assets as collateral which may be different from those of the benchmark index. This leads to the possibility that banks will use synthetic exchange-traded funds as an alternative to finance illiquid assets. However, in the event of default by the counterparty, the ETF could end up with assets in its portfolio which are not related to the fund's investment policy and/or assets which are expensive to liquidate as a result of their low level of liquidity.

This strategy used by some credit institutions in order to acquire liquidity through these investment funds might not be available, or even have negative effects on said liquidity, in the event of a stress situation in the market which reduces the value of the funds either as a result of redemptions by the unit-holders or through a reduction in the nominal amount of the contracts.

### 3.4 Effects on the secondary markets of underlying assets

With the aim of guaranteeing the greatest correlation possible with the return of the benchmark index and the portfolio of assets held by physical exchange-traded funds, providers need to carry out ongoing balancing through purchases and sales in secondary markets. Structured funds must also be adjusted, but in this case it is the counterparty of the OTC derivative which must carry out the adjustments.

The main reasons for carrying out re-balances in the portfolio are, on the one hand, daily changes in the prices of the benchmark indexes and, on the other hand, the entry and exit of unit-holders, which leads to a change in the fund's assets. These types of adjustments (re-balances), implemented through purchases and sales in secondary markets may distort the price formation of underlying assets, especially when the market on which they are listed is narrow and with a low level of liquidity, for example in the case of small listed companies and certain commodities. The gold market is a good recent example of the weight which exchange-traded funds may have on some markets. According to data from the World Gold Council, ${ }^{15}$ exchange--traded funds on gold accounted for $17 \%$ of the world gold demand in 2009 and $9 \%$ in 2010.

Funds with the greatest amount of assets under management or those which have leverage have a higher potential risk of impact, especially in situations of high volatility. Therefore, a preventive task by providers and supervisors relates to the design and authorisation of funds. This analysis is especially important in the case of leveraged funds or funds which use assets with a lower level of liquidity. In these cases, it is necessary to consider the size of the fund and its possible growth and to put this in the

[^30]context of the liquidity of the benchmark assets so to avoid possible significant impacts of the adjustment of the fund's portfolio on the assets of the reference market.

However, it should be pointed out that this potential impact on the markets of the underlying assets is not exclusive to exchange-traded funds, as guaranteed funds and structured products may also lead to this type of effect and, therefore, the impact of these products on the reference markets is usually assessed by providers and supervisors.

Another of the consequences of following passive investment strategies based on replicating indexes is the greater correlation between price movements in the assets included in the index. It is essential to monitor this effect due to its possible systemic implications, given that in situations of high uncertainty or stress in the market, it favours movements in one direction such as the generalisation of massive sales of a wide range of assets.

Some experts have recently suggested to the U.S. Senate Banking Committee ${ }^{16}$ that the proliferation of ETF will lead to a reduction in the number of growing companies which decide to obtain funding from equity markets. These experts indicate an increase in exchange-traded funds in the segment of growing companies would increase the correlation of the return of the shares of these companies among each other and also with the stock market itself, thus reducing the appeal for investors in terms of diversification. The explanation of this phenomenon, according to the expert witnesses, is that the ETF specialised in this segment have substituted other investors in the provision of liquidity, but that their market decisions are based to a lesser extent on the individual position of each company, and more on the general trend of the market and of the investment flows of their unit-holders.

## 4 Conclusions

Exchange-traded funds offer advantages to both retail and institutional investors, and therefore their assets under management have grown significantly over the last ten years. At the same time, the use of complex structures used by providers to replicate the benchmark returns have grown and the range of assets included in these indexes has widened, now including securities with little liquidity and commodities

Consequently, it is necessary to strengthen supervision of the sector with the aim of identifying possible aspects in the design of exchange-traded funds or their practices which may have a negative impact on investor protection and financial stability, and then to develop mechanisms to mitigate these problems. Any initiative in this regard must respect, and if possible strengthen, the beneficial features of these products for their clients.

[^31]It is therefore important to address the treatment of and, as the case may be, limits to marketing exchange-traded funds with excessively complex structures to retail investors, as well as increase the information and transparency on investment and management policies which involve taking on risks with counterparties. The reform of the MiFID Directive which is currently under discussion envisages measures in this direction.

The counterparty risk of exchange-traded funds which use OTC derivatives and securities lending is one of the elements which has been identified in several recent studies as a source of potential risks. Reforms in the infrastructures of OTC derivatives markets that have begun in the United States and Europe, which include settling in central counterparties the contracts with greater standardisation and strengthening the bilateral management of margins, should reduce counterparty risk. It is also important to remember that all the funds approved in Europe under the UCITS Directive have a limit for counterparty risk with each institution set at $10 \%$ of the value of their assets. This may limit possible systemic effects and the level of risk taken on by investors.

Furthermore, from a systemic point of view, it is necessary to thoroughly assess the role that structured ETF may play in the provision of liquidity to credit institutions which act as counterparty in the OTC contracts used by said funds. Accordingly, the provision of collateral in the form of illiquid assets may have sometimes acted as a resource for credit institutions to obtain liquidity. However, in situations of market stress, this mechanism may drop quickly and become a channel of contagion within the banking system.

Special attention needs to be paid to exchange-traded funds on commodities, small caps and low liquidity assets. For these underlying securities, it is possible that in the short term the prices of some ETF have a considerable impact on the prices of these assets if the former are a significant part of their market, not only in the opposite direction as could be expected. It is therefore necessary that both providers and supervisors closely monitor the volume and composition of the funds' assets and their effects on the liquidity of the markets of the underlying assets so as to avoid potential distortions in price formation.

At any event, it should be underlined that the concern generated among supervisory authorities by exchange-traded funds is not due so much to the nature of ETF as it is to the fact that recently there has been a tendency for these types of products to use structuring strategies which could generate the aforementioned problems. In this regard, it should be remembered that exchange-traded funds offer specific advantages to investors and that most of the risks described are also present in other financial products.

## Annex: Tracking errors in ETF listed on Spanish markets

As has been mentioned, most ETF specify that their investment policy is aimed at tracking price indexes published by third parties. This makes it possible to calculate their tracking error with regard to that explicitly declared target, unlike other investment funds in which their strategy is not explicitly stated.

It should be remembered that ETF providers warn in their prospectuses about the possibility of tracking errors. A typical formula for specifying these warnings is, for example, as follows: "There is no guarantee that the fund's management target will be met. No asset or financial instrument allows automatic and ongoing replication of the index [...]. Similarly, the fund may not perfectly reproduce the results of the index [...] mainly due to the temporary unavailability of such securities which make up the index or to temporary circumstances [...]".

In the case of ETF, tracking errors may be analysed from the two types of prices of the units in these funds: the net asset values associated with the issue of new units (primary market) and the list prices (secondary market). An example is shown below with the main results of an analysis of the tracking errors for the net asset value of 68 of the funds listed on BME.

This estimate uses available data on the net asset value in euros of the aforementioned ETF, published by Reuters-Lipper, for each last day of the week from November 2008 to November 2011. In the cases in which the ETF paid dividends, these are considered to be reinvested in the fund itself. Furthermore, for each fund, the value of the benchmark index indicated in its prospectus has been obtained and, if it is denominated in a foreign currency, this has been adjusted to the value in euros.

Using both values we have calculated the weekly returns of the net asset value of the fund and of its benchmark index over the period in which both were available. Tracking errors have been expressed based on two parameters:

- The regression coefficient between the weekly return of the fund and of the index. If the tracking was perfect and ignoring other frictions (payments of fees to the fund, tax withholdings on dividends or different times for calculating the net asset value and the index), this coefficient should be 1 .
- The annualised volatility of the tracking error. This indicator directly shows the importance of the tracking error over a period of time (in this case, a week). ${ }^{17}$ A higher value implies that the unit-holder is suffering greater risk of deviation from the index.

[^32]Figure $\mathrm{Al}_{1}$ shows that, in terms of the regression coefficient, most of the funds show a return close to that of the benchmark index. A total of 53 of the 68 funds show a regression coefficient between 0.95 and 1.05 .


Source: Reuters-Lipper and CNMV.
Volatility of the tracking error of the same ETF is shown in figure A2. 34 of the 68 funds have a typical annual deviation lower than $3 \%{ }^{18}$ On analysing separately the benchmark indexes denominated in euros and in European markets and the rest, we can see that the latter group has a greater tracking risk, which could be due to the measuring error generated by the different closing times of the markets of the underlying and of the currency.

This type of error may have consequences if the investor is not aware of it and, consequently, it has not been included in the decision-making process. This type of error may have even more significant consequences if the investor uses any of these ETF to hedge against other risks. At any event, it should not be concluded that this problem is greater in ETF than in other investment funds which have not been analysed herein given that the presence of tracking errors is possible in many different investment strategies based on the replication of an index.

18 In order to facilitate analysis of said volatility, the annualised volatilities of different indexes are presented. The Markit Iboxx Eurozone 3-5 Year Total Return index had volatility in 2011 of 2.9\%, the DAX index had volatility in the period 2009-2011 of $22.7 \%$ and the lbex 35 had volatility in the period 2008-2011 of 29.2\%.


Source: Reuters-Lipper and CNMV.

## Financial education and its importance in economic decisions: evidence and initiatives

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## 1 Introduction

The importance of financial education has grown over the last two decades as financial markets have developed, and as a result of economic and demographic changes. Both the needs of individuals and the range of financial products offered have increased and become more complex.

The needs of individuals have changed as social, economic and demographic changes have led to a growing complexity in their decision-making. Factors causing these changes include the increase in income per capita, which is accompanied by a greater total volume of savings; the growing level of indebtedness over the last two decades and, especially, over the years prior to the current crisis; increasing life expectancy; and growing instability in the job market. In particular, the lack of planning by individuals with regard to the timing of their retirement has led to special attention towards the impact of the reduction in public pension coverage and the increase in life expectancy.

Financial markets have become increasing complex, mainly due to gradual deregulation, the existence of new distribution channels and the development, especially over the last 20 years, of new financial products.

Due to the growing sophistication of financial products and markets, consumers are no longer limited to only choosing between interest rates or between two different loans or savings plans, but they are faced with a wide range of options with a great variety of complex financial instruments for saving or borrowing. Therefore, the task of suitably managing and distributing the financial resources of individuals and households is much more complex, and the skills and knowledge necessary are greater than in previous generations.

As a consequence of this, financial education is acquiring increasing importance, and not only for investors in the strictest sense. It is also essential for any family when managing its budget, buying a home or ensuring appropriate resources for their retirement. Obviously, individuals have always had to take this type of decision and manage their finances, but the above-mentioned recent developments mean that their level of financial education takes on an increasingly greater role when ensuring that they take financial decisions correctly and using the appropriate information. Improving the financial education of the general public favours better assignment of resources and therefore contributes towards increasing social welfare. On the contrary, low levels of financial education, in addition to being a potential threat for the asset integrity of individuals, may lead to net losses in terms of social welfare.

This article brings together the main studies conducted with regard to the effects of financial education or financial literacy on the investment and savings decisions of
individuals (section 2). The article also presents the public initiatives carried out in different countries to increase the level of the general public's financial knowledge (section 3), with special emphasis on the actions within the framework of the Financial Education Plan which is being carried out in Spain by the CNMV and the Bank of Spain (section 4). The main conclusions of the article are presented at the end (section 5).

## 2 The effects of financial literacy

The first important studies relating to financial literacy date from the 1990 and were mostly triggered by the falling savings rates seen in U.S. households from the start of the previous decade, within the framework of a growing effort to design policies to encourage their recovery. The debate essentially focused on the effectiveness of tax incentives for saving, although other lines of research arose, such as that which explored the possibility that the low savings rates of individuals were at least partly caused by a lack of financial knowledge. Among these papers, we should mention that of Bernheim and Garret (1996), ${ }^{1}$ in which the authors analyse the results of the survey conducted in 1994 among U.S. individuals between 30 and 48 years old which included both demographic and economic data and other information relating to economic-financial knowledge. Based on the results obtained in the survey, the authors concluded that savings rates, both in general terms and those dedicated to retirement, increased with the provision of education on these issues in the workplace. More specifically, the authors found that the probability of participating in certain savings programs, such as the $401(\mathrm{k}),{ }^{2}$ were greater for those employees with education about retirement than for those with no education.

In another subsequent paper, Bernheim, Garret and Maki (1997) ${ }^{3}$ conducted a study with similar characteristics so as to establish the effects of financial education for school-age children on individual savings and to see its effects on long-term behaviour. With this aim, the authors used a survey carried out in 1995 which contained a sample of individuals living in the U.S. aged between 30 and 49 years old, some of which had studied in states where consumer education programmes had been carried out during high school and others which had lived in states with no such courses. The main conclusion of this paper is that education policies significantly increase the savings rates of individuals and wealth accumulation during adulthood.

Now in the $21^{\text {st }}$ century, there have been several studies aimed at investigating the relationship between financial education and financial behaviour in different areas.

[^33]On the one hand, more in-depth studies have been conducted on the relationship between saving for retirement and financial literacy and, on the other hand, others have been conducted on the implications in other areas of individuals' financial practices, such as participation in securities markets, the choice of investment funds or debt management.

The paper by Lusardi and Mitchell (2006) ${ }^{4}$ exploits data from the U.S. Health and Retirement Study (HRS) for 2004, and analyses the level of financial literacy among individuals over the age of 50 . The main conclusions that the authors obtain are, firstly, that levels of financial knowledge (for example, compound interest and inflation) are low and, secondly, that financial knowledge and retirement planning have a clear positive correlation. Furthermore, those individuals with higher levels of financial knowledge tend to invest in more sophisticated products, such as shares. In a subsequent paper, and with data obtained from the same survey, Lusardi and Mitchell $(2007)^{5}$ analyse the accumulation of wealth by the baby boom generation (born between 1950 and 1960). The conclusions are similar to those obtained by these authors in the aforementioned 2006 paper: good retirement planning has a positive correlation with financial knowledge, as well as with wealth levels, after controlling different socio-demographic factors. The same authors, in a subsequent paper (see Lusardi and Mitchell, 2009), ${ }^{6}$ corroborated these results and extended their analysis using the data contained in the American Life Panel (ALP), which facilitates a much more thorough analysis of financial knowledge. In addition to concluding that financial knowledge is a key determining factor for retirement planning, the authors observed that said knowledge is higher in those individuals which, at school or in the workplace, have received some type of financial education.

Finally, one of the important papers which aim to study the relationship between saving for retirement and the levels of financial knowledge is that of BucherKoenen and Lusardi (2011). ${ }^{7}$ This paper conducts research on German households very similar to that conducted on U.S. households in Lusardi and Mitchell (2006). The reference database is the German SAVE survey, ${ }^{8}$ specifically that carried out in 2009, which includes a series of questions relating to financial knowledge. In general terms, the financial knowledge of German households is moderate, being substantially lower in East Germany. With regard to the possible correlation between this knowledge and individual retirement planning, the authors again observe that there is a positive impact of financial knowledge on saving for retirement.

[^34]Furthermore, the relationship between financial education and investment in investment funds has been analysed by Hastings and Tejeda-Ashton (2008). ${ }^{9}$ The authors of this paper examine the data obtained in a survey conducted in Mexico in the context of the relatively recent introduction of a privatised Social Security system. Through this experiment, they show that the survey participants with high levels of financial knowledge place more importance on commissions than those who have lower levels of knowledge. The latter group is also more sensitive to changes in the form in which the information is presented. For example, when the commissions are presented in absolute monetary terms, their effect on savers' decisions is greater than when the commissions are presented as percentages. This effect is much more significant in the case of savers with the worst levels of financial education. In addition, the paper shows that the importance given to commissions falls when past returns are included in the presentation of information, with this affect being lower for individuals with a good level of financial knowledge.

Financial education has also been studied as one of the possible factors which influence the level of indebtedness of households and individuals. An important paper which analyses this influence is that of Stango and Zinman (2009), ${ }^{10}$ which studies how consumers perceive the costs and benefits of savings and debt. According to their analysis, consumers have a tendency to linearise the accumulation of the returns of an investment, when in reality they grow at an exponential rate. This means that they underestimate the future value of an investment or loan. That is, in an investment, they tend to under-value the gains or returns, while in the case of loans they underestimate the implicit rate of interest. The authors suggest that the level of financial knowledge, or what they call "financial sophistication", may be one of the main reasons for this bias. They analyse this relationship and find a strong correlation between the bias of exponential growth (the tendency to linearise exponential functions) and financial sophistication.

The tendency to under-estimate the interest rate of borrowings is also one of the conclusions drawn by Lusardi and Tufano (2009), ${ }^{11}$ who design a survey for obtaining the relationship between financial knowledge and the levels and cost of debt. With regard to the bias in calculating the return on investments and loans, individuals with low financial knowledge state that their levels of debt are excessive or that they are incapable of determining whether their debt position is appropriate. Similarly, the authors find that there is a strong negative correlation between the financial knowledge of the individuals surveyed and the costs and commissions of the loans which they take on. Another paper following this line of research, by Hilgert, Hogarth and Beverly (2003), ${ }^{12}$ also observes that debt and credit management is correlated to individuals' financial knowledge. The authors use the data obtained in the monthly consumer survey of November and December carried out by the University of Michigan.

[^35]Investment in equity markets and the connection with levels of financial education have been analysed in Van Rooij, Lusardi and Alessie (2007). ${ }^{13}$ This paper uses data from the DNB Household Survey, which contains a representative sample of Dutch households and provides information on savings and the composition of the investment portfolio and also incorporates a questionnaire so as to determine the different levels of financial knowledge and sophistication. The main conclusions with regard to financial education are, firstly, that this differs substantially depending on the survey participant's education, age and gender. This suggests to the authors that any financial education programme will be more effective if it is aimed at specific population groups. The second conclusion is that the lack of economic-financial knowledge reduces the probability of participating in equity markets, i.e. that financial literacy is a significant determining factor when taking the decision to participate in the stock market. With data from the same survey (DNB Household Survey), these same authors conduct a more general study in which they analyse the relationship between financial literacy and wealth accumulation (see Van Rooij, Lusardi and Alessie, 2011). ${ }^{14}$ The results of this study show the existence of a positive correlation between the financial knowledge of households and wealth accumulation. Furthermore, it shows that the two basic channels which contribute towards this positive relationship are, on the one hand, the fact that individuals with financial knowledge are more inclined to invest in equity and, on the other hand, that the same individuals have a greater tendency to plan for retirement.

Another area of individuals' financial decisions which may potentially be affected by their financial knowledge is that of owners of small businesses. Following this line, Drexler, Fischer and Schoar (2010) ${ }^{15}$ analyse the impact of financial education on small businesses in the Dominican Republic. The results of this study suggest that an improvement in financial and accounting knowledge has a positive effect on the growth of businesses in this emerging country. However, these results are highly dependent on how the education is provided. In particular, when the business people are educated with standard financial accounting material, equivalent to an academic education, the effects are practically unnoticeable. However, when a simple model based on rules of thumb is given, the effects are evident in the business results.

Having verified the relationship between financial education or literacy and improved investment and savings decisions, some of the studies conducted over recent years have considered what the direction of causality is between these two variables as the conclusions might be important when designing policies aimed at improving the financial decisions of retail investors. These studies include the aforementioned study by Van Rooij, Lusardi and Alessie (2007) and that by Bucker-Koenen and Lusardi (2011). Both articles use methods based on instrumental variables for identifying the direction of causality. In the first, the authors use questions which measure financial knowledge prior to participating in the equity market as instruments,

[^36]while in the second the instrument is the exposure to the financial knowledge of other individuals from the same region. The results of these papers indicate that it is financial knowledge which has a positive and significant effect on financial decisions, and not the other way round.

At the same time as the aforementioned studies, several national and international bodies over the last two decades, and more intensely in the last five or six years, have been conducting studies and research in order to analyse levels of financial literacy. As mentioned above, during the 1990s, although not conducted in the formal context of any in-depth institutional study, an intense political debate began to arise in the United States on the appropriate measures to incentivise household savings and on whether the levels of financial literacy could have some effect in this matter.

Subsequently, over the first few years of the $21^{\text {st }}$ century, although some studies continued to be conducted, interest in this issue fell, to rise strongly once again in the second half of the first decade of the century. The international body which has most strongly pushed for the assessment of levels of financial education and the study of its consequences on investment decisions has been the Organisation for Economic Co-Operation and Development (OECD). An essential reference in this area is a study conducted by the OECD in 2005 entitled "Improving Financial Literacy: Analysis of Issues and Policies". This document presents the results of studies carried out in 15 countries belonging to the OECD on the levels of financial literacy of individuals and the effects of education programmes carried out in these countries. ${ }^{16}$ The conclusions obtained, which are relatively similar in the different countries, suggest that:

- The financial knowledge of consumers and potential investors is generally low.
- Individuals believe that financial information is both difficult to obtain and to understand.
- Individuals tend to overestimate their financial knowledge, that is, they believe they have more financial skills than they do in reality.
- A large part of the population finds it difficult to manage their financial situation, assimilate the information which is available to them and assess the risks which they are taking on.
- There is a low level of planning in most households, and consequently there is a high likelihood of rushing into debt without measuring the consequences and/or having difficulties in extraordinary situations.
- There is a high positive correlation between financial knowledge and the socioeconomic status of consumers. Hence, households with the lowest levels of income and wealth are those with the lowest levels of financial education.

[^37] Spain was not included.

To sum up, we can say that, in view of the empirical evidence provided by the above--mentioned studies and others conducted to date, financial literacy or education is a significant factor to bear in mind when analysing individual behaviour with regard to savings and investment decisions. Given this importance, it is essential to promote better financial knowledge in the general public, especially in retail investors, so that their decisions are taken on a well-grounded basis and with knowledge of their consequences and risks.

In addition, the level of financial knowledge, as concluded by all the studies mentioned in this article, whether conducted in the United States or in other countries (Netherlands, Mexico, Chile or Germany) is fairly low, which makes it especially appropriate for the corresponding authorities to intervene so as to improve the situation. This is already happening in many cases, as shown in the following section.

## 3 Public actions for financial education

International bodies, governments, supervisors and regulators are currently, in one way or another, facing up to the challenge of improving the financial culture of the general public. The recognised benefits of financial literacy have led to a large number of countries carrying out different initiatives based on recommendations issued by different bodies. These include those issued by the International Monetary Fund, the International Organisation of Securities Commissions (IOSCO), the European Commission and the OECD. As mentioned above, the most active body in this field is the OECD, as it has taken on the need to promote financial education as a priority since the start of the last decade. In July 2005, the OECD Council issued a recommendation calling on Member States to promote financial education, through the design of programmes aimed at the whole population and adapted to the specific needs of each group. With this aim, the OECD established a series of principles and good practices to be applied and disseminated by governments and public institutions. ${ }^{17}$

For the first time, in this document the OECD prepared a comprehensive definition of financial education which is widely recognised and goes beyond the simple provision of financial information and advice. Specifically, financial education is defined as "the process by which financial consumers/investors improve their understanding of financial products, concepts and risks and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being".

The recommendations of the European Commission are set out in the Communication on Financial Education, of December 2007, which indicates the importance of improving the financial education of European citizens so that they may take financial decisions responsibly. This document highlights the fact that financial education is an essential complement to consumer protection by helping to reduce information asymmetries between consumers and providers of financial products and

[^38]services. In addition, this communication describes the basic principles for developing financial education policy, taking into account the diversity of existing approaches and methodologies.

Some of the principles emphasise the need for financial education to be provided actively and to be available continuously throughout all the stages of an individual's life. They also emphasise the importance of promotion and coordination, both nationally and internationally, between the target groups and different bodies and social agents.

The growing awareness of the important role played by financial education in promoting social welfare has led to the creation of multilateral forums and groups working in this field, facilitating the exchange of experiences and international cooperation. It is important to highlight the role of the OECD in creating the "Project on Financial Education" in 2003, which is serviced by the Committee on Financial Markets and the Insurance and Private Pensions Committee. This project was extended in 2008 with the creation of the International Network on Financial Education (INFE), which currently includes the participation of over 170 institutions from 86 countries, including Spain, and the start-up of the International Gateway for Financial Education (IGFE), ${ }^{18}$ which serves as a platform for information, research and news on financial education programmes around the world.

The advances and progress made by this OECD network for international cooperation and awareness by means of high-level conferences and forums throughout the world have been very significant. Similarly, this forum has made a substantial effort in disseminating its messages by publishing numerous research papers on financial education throughout the world.

Partly as a consequence of the actions of the network, we can say that over recent years the basis has been established for the analytical framework and the debate on the familiarity of individuals with financial concepts. In this context, special emphasis has been placed on implementing financial education programmes in schools and in developing methodologies for assessing the efficiency of the programmes. As described below, it is generally English-speaking countries that have led financial education programmes from the start, which in turn have served as benchmarks for designing strategies in other countries.

One of the first public initiatives on a national level was that carried out in the United Kingdom, where in 2003 Financial Services Authority (FSA) developed and led the National Strategy for Financial Capability. ${ }^{19}$ Financial capability was defined as "being able to: manage your money, keep track of your finances, plan ahead, make informed decisions about financial products, and stay up-to-date on financial matters". The results obtained from the survey conducted in 2005 on more than 5,300 people to assess financial capability in the United Kingdom contributed towards establishing the priorities of said strategy and identified four noteworthy aspects: ${ }^{20}$

[^39]- Large numbers of people, from all sections of society, are not taking basic steps to plan ahead.
- Although the problem of over-indebtedness affects a small proportion of British society, many people may be affected in an economic downturn, such as the current one, due to lack of planning.
- Many people are taking on financial risks without realising it, because they struggle to choose products that truly meet their needs.
- The under-4os are typically much less financially capable than their elders.

In short, the survey showed that people from all sociodemographic levels and with different income levels lack the necessary skills to effectively manage their finances, which clearly demonstrates the pressing need to adopt appropriate measures to improve levels of financial capability.

The strategy for disseminating financial education in the United Kingdom was initially conducted following two complementary approaches. Firstly, the aim was to directly address financial consumers, providing them with certain resources, including a website (Money Made Clear) with several online tools (financial healthcheck, debt test, product comparison tables, etc.), a specific programme for employees in the workplace (Make the Most of Your Money) and a guide for new parents on how to manage their money (The Money Box). Secondly, the aim was also to reach the final consumer through intermediaries, such as school teachers (Learning Money Matters), student advice services in schools and universities, volunteers and support groups for excluded sectors of society.

With the entry into force in 2010 of the new Financial Services Act, a series of changes was established in the objectives and functions of the FSA in this area. In this regard, it set the priority objective of contributing towards improving financial stability and increasing public understanding of financial matters. Accordingly, the Consumer Financial Education Board (CFEB) was created, which redesigned the national financial education strategy and independently continued with the work of the FSA in promoting financial capability. ${ }^{21}$ Subsequently, in April 2011, the CFEB became the Money Advice Service. ${ }^{22}$ This personalised service offers free financial advice through different information channels (on-line, telephone service, personal service with a trained adviser and printed guides). In addition, the activities described above are extended with two new specific programmes: "The Redundancy Handbook" and "Divorce and separation", with financial advice which may be useful in situations of this type.

In New Zealand, the Retirement Commission is responsible for carrying out the national strategy for financial education. This Commission is an independent entity created in 1993 with the sole aim of providing education and information to New

[^40]Zealand citizens to prepare them for their retirement. In 2001, this body changed the focus of its planning programme in order to transmit a much wider concept of financial education which would cover all life stages. Consequently, in 2008 this institution began to coordinate and lead national policies on financial education with the collaboration of different public and private associations and agents.

As in other countries, surveys were conducted in New Zealand on the population's financial knowledge in 2005 and 2009. These surveys are comparable with those carried out in recent years in Australia on similar aspects. The results of both studies indicate that both New Zealanders and Australians have acquired a reasonable level of financial knowledge. In general, the average citizen in these two countries seems to understand the basic concept of risk, return and diversification reasonably well, but even so there are some areas which require special attention. The third survey is planned for 2013.

Sorted ${ }^{23}$ is the name of the website of the New Zealand financial education programme aimed at the general public: children, students, working-age people and retired people. This portal offers an extremely wide range of free resources adapted to the profile of each user. Furthermore, it serves as an integrated application where citizens can register and consult all the information about their financial situation (expenses, income, debts, etc.) provided by different calculators and online tools so as to update and control their personal finances.

With regard to academic education, since 2004 the New Zealand Retirement Commission has worked in collaboration with the Ministry of Education so as to include financial education in the school curriculum. Finally, the new curriculum published in 2009 provided for the development of financial capability in schools and is currently taught across the different subjects for pupils between 5 and 14 years old. For other pupils in more advanced levels and students of vocational training, a committee of independent experts has been set up which includes teachers, business people and unions so as to prepare and develop financial education programmes offered through higher education institutes, students' associations and professional schools. In other areas, such as in the workplace, free seminars are given and printed material and online resources are offered. Similarly, specific programmes have been designed for people with a low level of financial knowledge.

Another of the most significant examples is that of the United States, where there are numerous financial education initiatives aimed at a wide variety of groups. In 2003, the United States Congress, through the FACT Act ${ }^{24}$ established the Financial Literacy and Education Commission (FLEC) and designated the already existing Financial Education Office of the U.S. Department of the Treasury to provide support to the Commission. The Commission is chaired by the Secretary of the Treasury and made up of 22 federal agencies, including the SEC, the Federal Reserve, the Trade Commission and the Bureau of Consumer Financial Protection. ${ }^{25}$ The FLEC, through the U.S. Department of the Treasury, supports, coordinates and promotes all public and private financial education programmes.

[^41]Similarly, the U.S. government, by means of an executive order, created the President's Advisory Council on Financial Literacy. The Council, in addition to advising the President, has promoted, under management of the Treasury, several initiatives aimed at providing financial education to U.S. citizens. These include, firstly, the creation of the website MyMoney. $\mathrm{Gov}^{26}$ and introduction of the free telephone line 888-MyMoney, which offers financial tips and warnings. Secondly, a specific programme (MoneyMath: Lessons for Life) is taught in schools and a National Financial Literacy Challenge is conducted for high school students and there is also a network of volunteers to develop and design these activities and all those aimed at the most vulnerable segments of the population.

These actions are framed within the National Strategies published in 2006 and 2011 , the main objectives of which can be summarised in four points: ${ }^{27}$

- Increasing awareness of and access to effective financial education.
- Determining and integrating core financial competencies. ${ }^{28}$
- Improving the financial education infrastructure.
- Identifying, enhancing and sharing effective practices.

The actions aimed at achieving these goals include a national media campaign aimed at the target group so as to promote the messages and knowledge about the existing resources.

## 4 The CNMV and financial education

In Spain, the CNMV has carried out educational and informational activities addressed to investors since 2002. These actions are aimed at facilitating access to information and increasing the understanding of financial terms and issues so as to improve the consumers' investment decision-making process. Some examples of this are the information sheets known as "Investor factsheets and guides", which provide information on the main features of investment products and services, as well as the recommendations and warnings to bear in mind when operating in securities markets. Another complementary element is the Investor Portal, ${ }^{29}$ which is also aimed at retail investors and which offers a wide variety of multimedia resources, such as online courses, information bulletins, news and information of interest, enquiries, complaints and subscription to publications. The CNMV also participates in different national and international forums aimed at raising the

## 26 www.mymoney.gov

27 For further details, see FLEC (2006). The National Strategy for Financial Literacy, and FLEC (2011). Promoting Financial Success in the United States: National Strategy for Financial Literacy. velop their financial capabilities and take informed decisions. These concepts cover the issues of income, spending, saving and investment, borrowing and protection against financial fraud.
awareness and education of financial consumers, and participates in conferences, seminars, courses and fairs of different types promoted both by public and private bodies.

With the aim of improving the financial culture of all segments of the Spanish population, in 2008 the CNMV and the Bank of Spain signed a collaboration agreement to develop the Financial Education Plan. Various activities and projects have been carried out since it was first implemented. These include the design and launch in May 2010 of the Spanish portal of financial education, www.finanzasparatodos. es, which represents the first visible milestone of the Plan. This portal aims to cover a wide set of possible financial situations faced by most individuals over their lives. The website offers useful content in simple everyday language, and presents a wide variety of practical tools for helping to manage personal finances, which allow, for example, the user to prepare a personalised budget, calculate loan payments, estimate a reasonable level of indebtedness, etc.

Other activities carried out in the context of the Plan involve the preparation of a collection of twelve printed factsheets on "Basic tips for family finances", which were widely disseminated by means of press and magazine inserts or which were made available to consumers in public places. Financial education courses have also been given in different autonomous regions by means of a collaboration agreement with the National Consumer Institute. These courses are aimed at consumer professionals and people who will train the professionals ("training of trainers"). ${ }^{30}$

One of the most important challenges and a key priority has been and remains the introduction of financial education in schools and colleges. Consequently, for the 2010/2011 academic year, a financial education pilot program was carried out in the third year of Compulsory Secondary Education (Spanish acronym: ESO), with the collaboration of the Ministry of Education. The programme involved almost 3,000 students and 70 teachers from 32 different schools belonging to 14 autonomous regions in addition to Ceuta and Melilla. A minimum of ten hours were taught on basic personal finance concepts (savings, means of payment, responsible consumption, etc.). This involved providing both teachers and pupils with a variety of teaching tools, including guides for students and teachers and an Internet portal, Gepeese, ${ }^{31}$ designed specifically for this purpose. This portal contains multimedia resources and tools, such as games and activity workshops and acts as a complementary support to the pilot programme as it has a wider scope and aims to provide guidance not only to pupils but also to their parents.

With regard to the role of schools in promoting financial education and responsible behaviour, the OECD recommends that the teaching of financial education begins as soon as possible. This was laid out in the PISA Report ${ }^{32}$ (Programme for International Student Assessment) for 2012, which for the first time will assess the financial

30 This activity responds to principle 6 of the Communication on Financial Education of the European Commission, of 18 December 2007, for high-quality education schemes.
31 www.gepeese.es
32 PISA is a standardised assessment which the OECD carries out in over 65 countries with the aim of assessing pupils' knowledge and skills.
competencies of 15 -year-old students. To a certain extent, this represents a drive for countries to introduce financial education into the school curriculum.

## 5 Conclusions

In 2009, Ángel Gurría, the OECD Secretary-General indicated that "the low level of financial literacy observed in most countries, has been - if not a direct cause of the crisis - at least one of the aggravating factors". This declaration is a demonstration of the growing interest in financial education among key international authorities and bodies. The current crisis has revealed some situations which might have been mitigated if individuals' levels of financial knowledge had been higher. A specific case is the increase in the sale of certain products to retail investors, who had difficulty in understanding the information provided and assessing the risks which they were taking on.

The literature analysed herein and the studies conducted by different countries and institutions coincide in diagnosing the deficient education of individuals, who manage their personal finances in a clearly sub-optimal manner. The causes for this include the lack of planning by citizens which lead to them facing financial difficulties as a result of changes in their personal situation, which is often indicated as one of the most important areas for improvement. One of the main concerns with regard to the lack of planning is related to retirement, especially in countries with predominantly private pension systems, although it is also increasingly important in countries with public pension systems due to current reforms aimed at ensuring their sustainability and the growing importance of private schemes. In fact, most financial literacy programmes were initially aimed at workers so that they could satisfy and discover the different savings alternatives for their retirement.

The level of financial education is also important in other areas, such as participation in securities markets or investment funds. For example, the lack of financial knowledge constitutes a barrier when investing in shares and various studies have shown how the financial decisions of individuals are significantly influenced by aspects such as the manner in which the information offered by investment funds is presented, which highlights the presence of certain difficulties in accurately interpreting the information provided by marketing entities.

There is currently a wide consensus with regard to the role of financial education as a key element, both for personal financial well-being and for contributing towards global financial stability. Over recent years there has been an improvement in the mechanisms for transmitting the information available for consumers. However, the usefulness of this development may be undermined if the information is not understood and not appropriately processed by individuals. It is therefore necessary for this process to be accompanied by policies aimed at improving consumers' financial knowledge.

The increased awareness of multilateral bodies and national authorities has been laid out in different financial education programmes, and some countries have created specific institutions responsible for carrying out this task. In Spain, since 2002,
the CNMV has been carrying out activities aimed at improving investor education and information with tools such as the "Investor factsheets and guides" and the Investor Portal. Over these recent years and, partly due to the financial crisis, the aim has been to provide a greater boost to the education of individuals in financial matters. Hence, in 2008 the Financial Education Plan was launched by the CNMV and the Bank of Spain. This plan involves performing different activities and projects in line with the recommendations and principles of the European Commission and the OECD.

III Regulatory Novelties

# The reform of the Spanish clearing, settlement and registry system 

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## 1 Introduction

This article provides an overview of the ongoing project to reform the Spanish clearing, settlement and registry system, a project which started in February of 2010 at the initiative of the CNMV, with the support of the Bank of Spain. Some of the key issues and concepts concerning the reform are addressed both from an economic--financial and operational point of view, and from a legal standpoint, in order to provide an integrated vision, at a theoretical and practical level, which will be an aid to understanding the goals of the reform and the way to achieve them.

In section 2 of the article we look at the background and the first steps of the reform project. In section 3, we deal with the main harmonising projects in the area of clearing and settlement which are currently under way in Europe and which will doubtless have a decisive influence on the reform process of the Spanish system.

Section 4 refers to the operational changes which make up the central pillar of the reform. Specifically, we examine the introduction of centralised clearing services in one or several central counterparties (hereinafter CCP) for stock market transactions made on multilateral trading systems, which will enable the principle of assured delivery to be abandoned, the timing of transaction finality to be modified, and the present model of settlement and registry based on Registry References (hereinafter RRs) to be scrapped and replaced by a balance-based model. We also examine the implementation of a standardised procedure for keeping securities accounts, which will facilitate supervisory tasks by replacing the provision of RRs for the monitoring and traceability of settled transactions.

Section 5 deals with the most important new developments of a legal nature arising from the reform. We explain the concept of novation, which is linked to the interposition of a CCP, and the repercussions of the reform of the Spanish system on the timing of order finality. Next we examine the legal effects of the elimination of RRs and the change to a balance-based system, and we present the most important modifications to the rules of insolvency law related to the registry of securities represented by book entry.

Section 6 looks at the most important regulatory developments arising from the reform, and provides a detailed description of the necessary changes to regulatory rules. It also describes the internal operating rules and the administrative acts which will need changing and developing. In section 7 we comment briefly on the current state of play of the process. The article closes with section 8 , in which we present our conclusions.

## 2 Background and first steps of the securities clearing and settlement system reform project

The integration processes of domestic post-trading systems which are currently under way in the European Union (EU) require the Spanish clearing, settlement and registry system to make certain changes. In a joint report in $2007^{1}$ the CNMV and the Bank of Spain identified a number of specific aspects of the stock market settlement system which were standing in the way of greater harmonisation with standard European practices and which made the system less efficient, and found that there was a need to make substantial changes to the Spanish model. The document mentions the principal harmonising projects in progress at the time, including the TARGET2 Securities project (T2S), how the Spanish system could adapt to the proposed platform, and the promotion of a specific European regulatory initiative to harmonise the clearing, settlement and registration of beneficial owners. Among the most important specific aspects that the above-mentioned report finds should be changed is the RR-based tracking of beneficial ownerships and the principles governing the stock market settlement system, including that of the assured delivery of securities. Any change to the latter would require modifying the timing of the finality of equity transactions. Taking into account the need to maintain the level of security of the current system, the report also called for an appraisal of the viability of introducing clearing services centralised in one or several CCPs.

February 2010 saw the start of the securities clearing and settlement system reform project with the publication of a document submitted to public consultation. The general response, which includes the opinion of a very significant sample of the European financial industry, supported and was fully in favour of the initiative of the CNMV and the Bank of Spain, especially regarding the goal of converging as soon as possible with the practices of our fellow Europeans.

The document submitted to public consultation included the following key proposals:

- To promote, in line with other European systems, the introduction of clearing services provided by a CCP which will act as a counterparty for all transactions made on the stock exchange, will manage counterparty risks in a centralised manner, will be responsible for clearing transactions, will guarantee that the risk of default by any of the participants involved is covered, and will simplify the settlement of stock market transactions.
- To make the settlement system more flexible, by using a balance-based system for the settlement of securities and cash, and making the necessary adaptations to the securities registry system, including a new control system which will provide levels of security and supervision similar to those provided by the current RR-based system.

[^42]- To change the current principle of assured delivery and move transaction finality from the trading stage to the settlement stage.
- To introduce a system of penalties for settlement default in order to discourage failed deliveries of securities or cash, to repair the economic damage caused, and to cover the costs incurred in resolving or mitigating them.

Subsequently, in January 2011, a new document was published and submitted to public consultation which contained specific proposals regarding various aspects of the reform, such as the institutional architecture, the legal regime, risk management, etc., as well as changes to the settlement and registry system. There was a strong response, once again including a very significant representation of the European financial industry, particularly from European market and post-trading infrastructures and their participants and users. The proposals were generally very favourably received and the response supported the basic components of the reform; in particular, the promotion of the inclusion of clearing services delivered by at least one CCP for stock exchange transactions, the replacement of the RR-based settlement system with a new one based solely on balances, and the review of the principle of assured delivery. The responses once again stressed the advisability of undertaking the process as soon as possible and the need to assume the cost of the reform.

As a continuation of the process, and taking into account the suggestions received during public consultation, the CNMV placed a law amendment proposal before the Ministry of the Economy and Finance. The Ministry drafted a legislative initiative which it submitted to the Lower and Upper Houses of Parliament (Congreso de los Diputados and Senado) and which, after the relevant parliamentary proceedings, resulted in the promulgation of Law 32/2011, of 4 October, amending Law 24/1988, of 28 July, on the Securities Market (hereinafter Securities Market Act).

## 3 Harmonising projects of post-trading processes in the EU

Several harmonising projects are currently being developed in the field of clearing and settlement in Europe which are going to have a decisive impact on the reform process of the Spanish system and which should be taken into account in the final design and implementation of the reform. One of the most important of these is the Eurosystem project for setting up a technical platform to provide a centralised securities settlement service ( $\mathrm{T}_{2} \mathrm{~S}$ ). There are also a number of European harmonising legislative initiatives at various stages of development which will establish a common regulatory framework for post-trading processes. Among these we would highlight the European regulation of central counterparties via the European Market Infrastructure Regulation (EMIR), legislation on central securities depositories (CSD), and the future directive on the legal certainty of securities holding and dispositions (Securities Law Directive).

Below we present a brief summary of these ongoing legal initiatives of an integrating nature.

### 3.1 TARGET2-Securities

TARGET2-Securities ( $\mathrm{T}_{2} \mathrm{~S}$ ) is a Eurosystem project which aims to facilitate the centralised settlement, in money from the Central Bank, of securities transactions in euros or in other currencies. ${ }^{2}$ The project aims to take advantage of synergies with other Eurosystem facilities, in particular with the TARGET2 payment system.

T 2 S is aimed at both domestic and international CSDs, to give them the possibility of using a common technical solution for settling securities transactions. The CSDs will maintain their business and contractual relationships with the participants and will continue to provide securities safekeeping and administration services (such as corporate actions management), and other services.

T 2 S represents an important step towards the creation of a single integrated securities market for financial services. It will enable us to put the cross-border and domestic settlement of securities in Europe on the same level in terms of efficiency and costs in each jurisdiction. It will also complement and facilitate the achievement of the targets proposed by other previous European initiatives, such as the two reports from the Giovannini Group published in 2001 and 2003, respectively, ${ }^{3}$ and the Markets in Financial Instruments Directive (MiFID).

The changes which are proposed in the reform of the Spanish system will enable settlement in Spanish markets to be fully aligned with the model proposed by the T 2 S project and will facilitate the interoperability of the Spanish settlement system with existing systems in Europe.

### 3.2 European regulation on OTC derivatives, central counterparties and trade repositories (EMIR) ${ }^{4}$

As mentioned earlier, one of the pillars of the future legal harmonisation of post--trading in Europe which has a direct impact on the reform process of the Spanish system is the project to regulate several areas of post-trading (clearing, settlement and registry), the first component of which is the future European regulation on OTC derivatives, central counterparties and trade repositories (EMIR).

[^43]The origin of this regulation dates back to 25 September 2009, when the G-20 leaders agreed that "All standardised OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by the end of 2012 at the latest. OTC derivative contracts should be reported to trade repositories". ${ }^{5}$ In answer to this call, throughout 2010 and the beginning of 2011, the various European institutions have been working on the production of a legislative proposal to implement this mandate, the EMIR initiative. The schedule of actions calls for the drafting of a series of binding technical rules which will implement the key details of the new regulation. These technical rules will be issued by the European Commission once they have been drafted by the new European financial authorities, a task in which the European Securities and Markets Authority (ESMA) will play a central role.

Among the matters to be regulated by the EMIR initiative there will be items of great importance to the Spanish reform which will obviously have to be taken into account in that reform, such as the authorisation and supervision of CCPs, capital requirements, cross-border supervisory cooperation, organisational requirements, rules governing conflicts of interest, corporate governance, operating standards, collateral, and risk management.

### 3.3 European regulation of Central Securities Depositories

Another European regulatory project in the field of post-trading which is currently being developed in the EU is one which aims to harmonise standards for CSDs. By late 2011 a detailed draft document is expected to be published and submitted to consultation. This regulation, once adopted, is expected to determine, among other things, the nature of CSDs, their basic and ancillary functions, the conditions under which these entities will carry on activities reserved to credit institutions, the authorisation process of these infrastructures, the conditions for the free provision of their services in the EU, their supervision (including forms of cooperation between the different supervisors), the harmonisation of the management settlement defaults (including buy-back periods and penalties) and the shortening of the settlement cycle from three to two business days after the trading date. The reform of the Spanish system will aid compliance with the future regulation and, in particular, will flexibilise and speed up post-trading processes, enabling the settlement periods for trades to be shortened and any obligations that may be established in terms of shortening the cycle to be met.

### 3.4 Future directive on the legal certainty of securities holding and trading

The European Commission has submitted two documents to public consultation concerning the future directive on the legal certainty of securities holding and trading, although there is not yet any formal proposal. Its principal aim is to regulate the

[^44]holding of securities represented by book entry. A major debate has erupted about this draft directive because, while it aims to harmonise the legal effects of securities held on account from a functional point of view, regardless of the ownership regime applicable in each Member State, in a number of its provisions some discrepancies still arise regarding the regulation of ownership rights of securities in some EU Member States.

The purpose of this directive is to regulate the exercise of the rights of these investors against their broker, against the issuer, and against third parties. It also regulates, among other matters, the establishment of rights in rem over these securities as well as situations of insolvency of intermediaries. Given that the directive does not aim to impose a specific model of registry, the present Spanish securities registry system based on book entries could be maintained, although a number of regulatory changes would be required. However, it must be stressed that this regulatory project is still at a very early stage.

## 4 Main operational changes in the reform

### 4.1 Elimination of the principle of assured delivery

One of the principles governing the present Spanish settlement system is that of assurance of delivery, arising from the obligation established in the Stock Markets Regulation to settle all stock market trades. This obligation prevents trades from being cancelled and requires the provision of guarantees (margins) that enable the trades to be settled. Iberclear, the Spanish CSD, guarantees the delivery of both securities and cash through a set of mechanisms whose purpose is to settle all trades on their theoretical settlement date, which is currently three business days after their trading date. However, in practice it is not always possible to achieve the timely settlement of all trades on their settlement date and, consequently, there may be temporary excesses of recognised securities which, even though they are fully identified and controlled by the system, need to be eliminated.

One of the central components of the proposed reform is the elimination of the present principle of assured delivery of securities and its replacement by incident-resolving mechanisms involving the interposition of a CCP. The presence of a CCP is expected to be deemed mandatory at least for the multilateral trading mechanisms of securities exchanges and for Spanish multilateral trading systems on which securities listed on the former are traded, but it may also be considered to be a possibility, if the parties so desire, for bilateral stock exchange trades and for OTC trading in shares or in fixed income markets. The CSD will only be obliged to settle transfer orders of securities or cash for which the participants responsible for their settlement have previously certified the existence of those securities or cash, but the CSD will not have to provide any guarantee of completion. However, the CCP will be responsible for guaranteeing the completion of the trades in which it has intervened and may, as a last resort, cancel the trade if it is not possible to settle it using the procedures established for resolving incidents. The introduction of CCPs will make the present assurance of delivery mechanisms redundant, since once the services of one
or several CCPs have been introduced in the area of post-trading, there will no longer be any need for the provision currently contained in Royal Decree 116/1992 regarding assured delivery as one of the principles governing the function of settlement of stock market transactions and, therefore, the settlement activity of CSDs. ${ }^{6}$

This change also raises the need to consider ways of compensating the aggrieved party in cases in which the mechanisms for assuring delivery fail and it is necessary to provide compensation in cash. As we have already stated, the elimination of the principle of assured delivery changes the notion of absolute certainty in the settlement of trades which prevails in the current system, but the introduction of clearing services in one or several CCPs will eliminate the risk of situations of temporary excess in the balances of securities which is inherent to that principle.

### 4.2 Introduction of central counterparties

A CCP is an institution which interposes between the parties of financial contracts traded on one or more markets, becoming the buyer of every seller and the seller of every buyer, thereby assuming the credit risk involved. CCPs have been used by organised markets of derivative products and by some securities exchanges and trading systems, but in recent years their introduction has spread to a large number of markets, both regulated and unregulated (over-the-counter, OTC), including markets for trades with a securities buy-back agreement (repo markets) and for OTC derivatives.

One of the main pillars of the reform of the clearing and settlement system currently under way in Spain is the introduction of at least one CCP for equity transactions traded multilaterally on a regulated market or in a multilateral trading system. This obligation addresses the need to provide the system with legal certainty, even though the present model has performed very soundly and reliably.

In this context, a CCP would be responsible for the receipt and acceptance of transfer orders of securities and cash, would perform clearing operations, would ensure the finality of transactions, and would pass the results on to the settlement system which, in turn, would pass them to the registration system. Its function consists of assuming reciprocal obligations with the various clearing members, interposing itself in trades as the buyer of the seller and vice versa. As a result of this function, each trade in the market produces two registered transactions in the CCP: one purchase, in which the CCP acts as the counterparty of the clearing member of the buyer, and one sale, in which the CCP is the counterparty of the clearing member acting on behalf of the seller.

The institutional design of CCPs calls for these entities to be set up as public limited companies, separate from other legal persons of the existing scheme of relationships.

[^45]The rules of self-governance will be included in their articles of association, which must be approved by the Ministry of the Economy and Finance on the basis of a report from the CNMV. The details of these aspects may eventually be altered depending on the provisions of the EMIR.

CCPs will need to have high levels of financial solvency and the technical resources to be able to undertake the task of interposing themselves between buyers and sellers by correctly calculating the net positions in both securities and cash. A robust system of guarantees is also required, as is a legal regime which safeguards the successful completion of trades.

There is no harmonised regulation in Europe which establishes the minimum solvency and risk management capability requirements for CCPs. However, this and other aspects of the design and functioning of CCPs are expected to be addressed in detail by the EMIR initiative and its regulatory techniques. To date, the main reference in this respect comes from the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) which, in a document in 2004, set out a number of recommendations on the need for capital adequacy and appropriate control systems to meet the operational needs of the CCPs. ${ }^{7}$ Among the main recommendations of this document are: i) the need for a transparent and feasible legal framework; ii) the measurement, monitoring and limitation of the risk level assumed and the requirement of guarantees commensurate with those risks; iii) the capital adequacy of the CCPs and of the participants; and iv) some clear and public procedures to follow in the event of default.

In the current organisation of infrastructures and clearing and settlement system members we can identify three differentiated levels: i) trading, in which the market members and the trading platforms interact; ii) clearing, where the clearing members and the CCPs interact; and iii) settlement and registry of transactions, which involves the member entities and Iberclear as the CSD.

In the markets in which there is currently a CCP, different categories of participant members can be identified. Each trading market member must designate at least one clearing member; a trading member may have more than one clearing member.

There is a difference between the two main types of clearing member: individual clearing members and general clearing members. The former are responsible for their own activity and that of their clients, including all their obligations and requirements, such as deposits and margins. General clearing members are likewise responsible for their own activity and that of their clients, but the latter also include trading members who are not members of the CCP (non-clearing member) and who have a contractual relationship with a general clearing member for the clearing operations involved in their activity.

One of the main functions of CCPs is the centralisation and professional management of counterparty risk by their interposition in each of the bilateral obligations

[^46]created during trading activities, and the netting of each clearing member's balances of either securities or cash receivable and/or payable to the CCP. The netting of obligations considerably reduces the number of original market transactions to a far smaller amount of transfer orders of securities and cash which will eventually be settled in an aggregate amount which is considerably lower than the original one. The degree of reduction of the number of transactions and the total volume to settle as a result of clearing is known as the compression ratio. Also, as a result of the netting of reciprocal obligations, the outlay in margins for trades to be settled is much less, which is particularly interesting in a delicate economic situation such as the one today in which an efficient use of capital is called for.

As mentioned earlier, risks must be covered by a robust system of guarantees (margins) whereby amounts, adjusted almost in real time according to the risk assumed, are received from each member as each trade is accepted by the CCP. The system also has a default fund which is fed by contributions from the clearing members and from the CCP's own reserves, which must be appropriate to the CCP's volume of business.

The proposed model of settlement through a CCP must also have built-in flexibility to enable it to adapt to a future environment in which competition will be encouraged. This flexibility could manifest itself, say, in the coexistence of several CCPs and/or interoperability with other CCPs, or even with other central securities depositories.

### 4.3 Balance-based settlement model

Iberclear's present settlement procedures are very demanding in terms of the accurate identification of the securities sold, which must be presented during the proof of sale process prior to settlement. These elements give rise to a major overlap between settlement processes and registry processes, which in practice are hard to separate. At present, deliveries of securities require the provision of a code (RR) prior to their settlement. RRs were conceived as a way of achieving "an adequate control of the system". ${ }^{8}$ There is no doubt that RRs play an important role in the security of the system, as an element which integrates the central registry kept by the CSD and the accounting details recorded by the participants, and as a tool for attributing the securities to one specific owner rather than another.

One of the main pillars of the reform of the Spanish system is the replacement of the RR-based settlement and registry system by a system based on balances or aggregate positions. This change will have especially important repercussions on the operational area but will not involve any radical change from a legal point of view, although it will be necessary to make regulatory changes to reduce the legal risk that the change of model may entail.

In the new settlement and registry system which will be established by the reform the idea is to work on the aggregate positions of the participants' securities accounts.

[^47]Thus, the system will benefit from all the fungibility potential of the securities of each issue which, in turn, will enhance the flexibility and efficiency of the settlement process.

The purpose of the above is to take fuller advantage of the functional benefits of CCPs and to facilitate the participation of CSDs in integrating projects like T2S, which require settlement by netting, thereby making the system's processes more flexible. This will enhance the efficiency of the system and enable the settlement cycle to be shortened in the future, which will no doubt be called for in the short term in the EU, probably with the entry into force of the forthcoming regulation on CSDs.

The proposed change in the procedure will therefore bring about a greater functional separation between the areas of settlement and registry, as opposed to the current situation. This will favour the individualisation of the basic services of the CSD; i.e., in turn, it will enable the services to be provided separately, in line with the aim of the EC regulations currently in force or being prepared. The separation of services will also facilitate integration with projects like the T 2 S project which provide functionally separable services.

The RR code used in the present system includes the original trading date and the type of movement produced when the securities were registered. This data enables the ex-post reconstruction of all movements until settlement, which ensures transaction traceability and is an enormous help to the supervision of the trading, settlement and registration of securities. However, while RRs play an important role in ensuring the security of the securities registration process, they do not eliminate all custody risks, since the assignment of a specific owner to each RR is the responsibility of the participants.

In addition to the information already available at the CNMV through transaction reporting, the new system is also expected to provide the necessary information to enable supervisory functions to be performed as they have been to date. To this end, the reform project provides for the adoption of a standardised system for safeguarding securities. In terms of supervision this system will provide the same functionalities as the RR system provides now. Also, since the new system will be implemented after the clearing and settlement processes, it will not interfere with the performance of those processes and will actually make them more flexible and, if necessary, shorten the settlement cycle.

Furthermore, the new registration system will make it necessary to demand a greater degree of responsibility from the participants with regard to the exercise of their obligations, regardless of whatever mechanisms may be set up to safeguard the integrity and accuracy of the maintenance of detailed records, mechanisms which are absolutely essential. It is likely that a number of more stringent requirements than the ones in place at present will be imposed to ensure that the participants meet the demands of the responsibilities they will have to take on. In particular, having to carry out registration functions and maintain client securities accounts will require high levels of capital adequacy as well as very stringent requirements regarding technical resources and control systems.

## 5 Main legal changes of the reform

### 5.1 Finality and novation of transfer orders of securities and cash

### 5.1.1 Finality

In order to reduce the risk of systemic failures, securities clearing and settlement systems need to be fully protected against the possibility of one of their participants becoming insolvent. Regardless of any economic mechanisms that the managers of these systems may put in place to mitigate this risk, these systems also need to be adequately protected from a legal point of view. In this respect, of particular importance is the concept of finality introduced by Directive 98/26/EC, of the European Parliament and of the Council, of 19 May 1998,9 which was incorporated into the Spanish legal system by Law 41/1999, of 12 November, on securities settlement and payment systems. ${ }^{10}$ These provisions introduce a new legal concept, that of finality, applicable to entities performing securities clearing and settlement functions, provided that they are considered as systems for the purpose of the above-mentioned provisions.

After indicating in Article 11.1 that "any transfer orders entered into a system by its participants, once received and accepted in accordance with the system's operating rules, shall be irrevocable", Law 41/1999 establishes that transfer orders of securities and cash, once accepted by a securities clearing and settlement system, and any netting operations that may have taken place between them, shall be "final, binding and legally enforceable for the participant himself and enforceable against third parties", even if the participant initiates insolvency proceedings, provided that the transfer orders were accepted by the system before the insolvency proceedings were initiated. ${ }^{11}$ In exceptional cases, transfer orders and any netting that may have taken place may be considered final even after a participant has been declared insolvent, provided that the system can prove that it did not have, nor should have had, any prior knowledge of such a declaration and provided that certain circumstances exist.

The above-mentioned rules determine that each system will establish the moment when transfer orders become irrevocable for their originator, and the timing of transfer order finality.

Thus, both the directive and the Spanish law transposing it aim to reduce to a minimum any disturbance that might arise as a result of one of the participants in a clearing and settlement system for payments and securities being declared insolvent.

[^48]The aim is to minimise the risk that, as a result of the insolvency of a participant, transfer orders of securities or cash - and therefore trades in securities - may be cancelled or rescinded, which could cause not only the default of the insolvent participant, but also of other participants and of the CSD itself. Thus, orders and netting operations declared as final cannot be cancelled or unwound within the scope of insolvency proceedings affecting a participant.

But this regulation has gone one step further by establishing a special rule in respect of the guarantees posted in these systems. Thus, Law 41/1999 provides that not only do these systems enjoy full right of withdrawal regarding the guarantees given in their favour in the event of the insolvency of a participant, but it also provides that these guarantees cannot be challenged as a result of insolvency proceedings except in truly exceptional cases (in the event of creditor fraud, for example).

In addition to the matters above, there are a number of provisions regarding the netting of reciprocal payables and receivables as a normal manner of operating in these markets (Chapter II of Royal Decree-Law 5/2005, of 11 March) and regarding the guarantees required by clearing and settlement systems of securities and financial instruments (Articles 44 bis.8, 59.8 and 9 of the Securities Market Act). On this same subject, Article 44 ter of the Securities Market Act specifies, as has already been explained, that in the event of a member of a central counterparty or any of its clients being subject to insolvency proceedings, the CCP will enjoy a full right of withdrawal in respect of the financial instruments and the cash corresponding to the guarantees that those members or clients had posted or accepted. A similar right of withdrawal in favour of CCP members is also recognised in respect of guarantees posted by their clients.

At present, and until the reform is completed, Iberclear, as the securities clearing and settlement system, has rules (regulations and circulars) governing finality in its internal regulation. Since one of the principles which underlie Iberclear's operation is that of assured delivery, ${ }^{12}$ as explained earlier in section 4.1, finality is established in the stage immediately after the trading of the securities.

As mentioned previously, the current reform of the Spanish clearing and settlement system, set in motion by the approval of Law 32/2011, calls for the mandatory intervention of a CCP in multilateral equity trades on official secondary markets and in multilateral trading systems (MTS). CCPs, therefore, must carry out the functions of receipt, acceptance and netting of transfer orders of securities and cash, and report the results to a CSD which will complete the corresponding settlement operations. CCPs will therefore be responsible for ensuring the completion of stock exchange transactions instead of Iberclear. The Spanish CSD will settle the transactions if the entities involved have enough securities and cash.

Insofar as CCPs are potential generators of systemic risk, they should be considered as systems for the purposes of Law 41/1999 and must set their own rules regarding

[^49]finality. Meanwhile, and as a result of the changes described above, Iberclear, whose consideration as a securities clearing and settlement system is established in the selfsame Law 41/1999, ${ }^{13}$ will have to change its finality rules for stock market transactions.

In broad terms, at this stage of the reform we can say that order finality in CCPs should be placed at a stage immediately after the CCP has accepted contracts traded on multilateral trading platforms, once it is notified of the trades. For the CSD the finality of transfer orders of cash and securities should be placed at the settlement stage.

### 5.1.2 Novation

Article 31 bis. 7 of the Securities Market Act provides for the mandatory intervention of CCPs in the case of equity contracts traded on either an official secondary market or a multilateral trading system.

From an operational point of view, the idea is that once securities trades are made on the stock exchange, they will be reported to the CCP via the IT systems established for that purpose. In order for the CCP to assume counterparty risk for transactions it has to interpose itself between the two parties, acting as buyer for each seller and seller for each buyer. From a legal point of view, this interposition can be explained by turning to the legal concept of novation (Articles 1203-1213 of the Civil Code). The interposition of the CCP would give rise to a subjective novation as a result of the change of the subjects of each transaction. Thus each stock exchange transaction reported to and accepted by the CCP would be "converted" into two: one involving the clearing house with the buyer and the other being the clearing house with the seller. This process must be followed by a netting process which allows the CCP to calculate the net obligations on like securities and cash of each member which, when combined with highly skilled and specialised risk management, reduces (but does not totally eliminate) the risk of a delivery failing.

Thus, the concept of novation is especially important in connection with the activities carried on by CCPs. The Civil Code considers novation as a way of modifying or terminating obligations. Díez-Picazo (1986) says that it is necessary to look for the functional sense of the novation in each particular case, paying special attention to the will of the parties, in order to determine whether a novation only involves the modification of one element of the obligation or whether it implies the termination of all "rules of conduct" provided for by the first contractual relationship (conditions, terms, guarantees, etc.). ${ }^{14}$

From this preliminary theoretical viewpoint we would highlight how important it is that both the operational workings and the legal aspects of CCPs are appropriately resolved and integrated once the technological and legal design of the new system has been completed.

[^50]
### 5.2 The registration of securities represented by book entry

In Spain, securities may be represented by physical certificates or by book entries. However, in accordance with Article 496 of the consolidated text of the Capital Companies Act and Royal Decree 116/1992, on the representation of securities by book entries and the clearing and settlement of stock market transactions, securities listed on an official secondary market must be represented by book entry. In accordance with Article 8 of the Securities Market Act, securities are constituted when the corresponding book entry is made. Once registered, securities are subject to the rules set forth in Chapter II of Title I of the Securities Market Act and in Royal Decree 116/1992.

For securities listed on stock exchanges, the legislator has chosen a two-tier, centralised registry system, comprising a central registry kept by Iberclear and a detailed registry kept by Iberclear members. The central registry reflects the balance of securities for each category of security and for each member entity. The detailed registry of the members expresses the balance corresponding to each registered owner for each security, and separates into two accounts the member's balance of securities and the balance of securities held on behalf of third parties. In order to ensure the unity and consistency of the registry, Article 31 of Royal Decree 116/1992 provides that only owners which appear in the central registry (when the owners are Iberclear members) or in the detailed registries (when the owners are clients of Iberclear members) enjoy all the legal presumptions established by book entry representation.

The registered owner has a right in rem on the securities. According to Articles 9 and 12 of the Securities Market Act:

- The registration of the transfer in favour of the acquirer shall have the same effects as the conveyance of the certificates.
- The transfer will be effective against third parties from the moment of registration.
- Any third party acquiring securities represented by book entry for a consideration from another party who, according to the book entries, is entitled to transfer them, shall not be subject to any claim, unless that person acted in bad faith or with gross negligence at the time of acquisition.
- The issuer may only enforce against a good faith acquirer of securities represented by book entry the exemptions pursuant to registration relating to the document provided for in Article 6 of the Securities Market Act and which could have been claimed if the securities had been represented by certificates.
- Any person who is entitled according to the book entries will be presumed to be the legitimate owner and, consequently, may require the issuer to grant him the benefits afforded to him by the security represented by book entry.

Also, in the event of the entity responsible for keeping the accounting records being declared insolvent, the registered owner may, as owner of the securities, demand the withdrawal of the securities which he owns.

The reform of the Spanish clearing, settlement and registry system, set in motion by the Law amending the Securities Market Act, retains the above-mentioned aspects concerning the legal construction of securities represented by book entry, although the operational changes required to reap the functional benefits of CCPs and to coordinate the CSD with other European systems will be introduced as future regulatory developments occur.

### 5.2.1 Elimination of RRs and change to a balance-based system

The most important change affecting the registry of securities will be the amendment (or replacement) of Royal Decree 116/1992 and will consist, as mentioned earlier, of the elimination of registry references and their replacement by a system of control of the balances of book-entry securities held in the accounts kept by Iberclear and in the detailed accounts kept by participants for their clients, under the supervision of Iberclear and the CNMV. In this respect, Article 12 bis of the Securities Market Act states that the registry system should make every effort to ensure that there are no discrepancies between the securities recorded and the securities actually deposited with the entities responsible for keeping the registry and with their members, in order to strengthen the previously established obligation to control registry operations. ${ }^{15}$

In any event, the change from an RR-based registry control system to a balance--based system requires alternative control systems to be put in place to ensure that the new system maintains an equivalent level of security. Therefore, as was mentioned in section 4, two of the measures proposed by the reform are particularly important: on the one hand, a review of the technical and economic adequacy requirements of the participants and, on the other hand, a balance-based securities registration system requiring the standardisation of book-keeping by the participants. The participants will have to keep their records in accordance with standardised technical guidelines to be approved by Iberclear, which will make it easier to audit and oversee the system. Consequently, it will also be necessary to adapt the Spanish CSD's supervisory system of its participants, as well as the CNMV's supervisory system.

### 5.2.2 Features of the new registration system

While the detailed regulation concerning the configuration of the registry is in the hands of the regulators, we now describe some of the features of the proposal made by the CNMV in the document which was submitted to public consultation in February 2011. ${ }^{16}$

In line with the present regulation, for securities traded on markets a direct holding, two-tier centralised registry system is proposed. The central registry will be managed by Iberclear, which will keep an account for each participant and for each

[^51]category of securities that will reflect the balance of securities of which the participant is beneficial owner at any time, and another account which will reflect the overall balance of securities that the participant has registered in detailed accounts on behalf of their clients - the beneficial owners of the securities.

A new feature is that participants can keep segregated accounts for other non-participant entities. The most important feature of these accounts, generally provided for in other regulations for large financial institutions (investment or pension fund managers, international depositories, etc.) is that it allows these entities to keep the securities which they own separate from those of the accounts belonging to other entities, and separate from the accounts belonging to third parties held by the participant. The system calls for these segregated accounts to be always kept through a participant and not directly by the investment entity in the CSD, although the accounts should always be transparent for the CSD. The main advantage of these accounts is that the beneficial owner would not be affected by any shortfall of securities which might arise in the detailed accounts of a participant.

As is the case now, the important accounts for the purpose of determining ownership would be the accounts held in Iberclear, in the case of the participant's own account or in the case of segregated accounts, and the detailed accounts, in the case of the participant's clients.

However, in this scheme the clients' rights are contingent on the participants maintaining the accounts properly and diligently, so that the total balance of clients' general accounts recognised by Iberclear matches the sum of the balances of all the customers' detailed accounts. In the event of there being a shortfall of securities, the participant must remedy this and compensate the affected client in kind whenever that is possible. If it is not possible, the participant must compensate the client in cash. If the participant is in a situation of insolvency, the pro rata rule is of special importance. If the participant had attributed to its clients more securities than it actually held in the CSD, the participant should credit its clients with a pro rata share of its investment, so the clients would become creditors of the securities in the amount of the remainder, without prejudice to their right to be compensated through the Investment Guarantee Fund.

The pro rata rule could be seen as controversial, but it should be noted that it is more consistent with a system of holding securities on a balance basis and that it has been adopted by a large proportion of the legal systems of other Member States (Belgium, Germany and the United Kingdom, among others).

Along with these rules, the reform proposes the maintenance of the registration principles applied to the current registry system, such as priority and chain of title, although they are likely to need modifying during the regulatory development of the reform.

As has been mentioned, this system will need the access requirements for participants in Iberclear to be reconsidered, its supervisory functions to be redefined, and a new system of penalties for non-compliances in respect of the book entry registry to be introduced.

### 5.2.3 Insolvency aspects of the registry of securities represented by book entry

The reform of the Securities Market Act implemented by Law 32/2011 has introduced a number of particularities concerning insolvency as they pertain to the registration of securities represented by book entry.

Firstly, given that the registered owners of securities represented by book entry have the same ownership right in rem, the new Article 12 bis of the Securities Market Act establishes that, if an entity responsible for the book-entry registry of securities or a participant in the registry system is declared insolvent, the beneficial owners of the securities recorded in those book-entry registries will enjoy the right of withdrawal of the securities registered in their name, and may exercise this right by asking for the securities to be transferred to another entity. This right is complemented by a mandate to the insolvency judge and to the insolvency administration authorities to respect the rights arising for settlement transactions which were ongoing when the insolvency was declared.

Secondly, Article 12 bis of the Securities Market Act establishes the so-called "pro rata rule". This provides that when the securities with the same identification code (ISIN) are not sufficient to fully meet the rights of registered owners of those securities, the shortfall will be distributed on a pro rata basis among all the owners. Logically, the beneficial owners of the securities may personally bring legal actions to demand compensation for the missing securities. Regarding the insolvency proceedings, this proportional distribution of the shortfall will require the insolvency administration to identify each class of security, to determine the third party account balance in the CSD which is recognised as pertaining to the participant, and to determine the securities which the entity has attributed to its clients for the purpose of making the pro rata share out.

The law also provides that, when there are limited rights in rem or any other kind of lien on the securities, once the pro rata rule has been applied, any such liens will be understood to be against the result of the pro rata operation, as it is supposed that, for the remaining part, the lien is against the credit rights which subsist in favour of the owner of the securities.

The above provisions, and in particular the right of withdrawal of the registered owner, are complemented by another series of rules, which we might call public law rights, as enshrined in Articles 44 bis. 9 and 70 ter. 1 f) of the Securities Market Act - in force prior to the reform - which, in the case of the insolvency of depositories, entrust the CNMV with some of the task of coordinating the interests in play, in the sense that the CNMV must order the transfer of the securities of the clients of these depositories and of the cash resulting from the economic rights of the securities or of their sale.

## 6 Regulatory development of the amendment of the Securities Market Act

As well as the amendment of the Securities Market Act, the reform of the Spanish clearing, settlement and registry system requires a number of subsequent changes to other statutory rules. Until the approval of the corresponding statutory rules, the entry into force of the following provisions of Law 32/2011, amending the Securities Market Act, has been postponed:

- Article 31 bis.7, regarding the mandatory intervention of a CCP in transactions in shares and other equivalent tradable securities made in the multilateral trading segments of official secondary markets and MTS.
- Article 44 bis. 3 of the Securities Market Act, regarding the corporate governance of Iberclear (risk committee, appointments and remuneration committee, user participation mechanisms, and the prevention of conflicts of interest).
- Article 44 bis.4, regarding the elimination of the principle of assured delivery by Iberclear and the system of guarantees (margins) that the participants have to post with Iberclear.


### 6.1 Changes to statutory rules

Firstly, a major amendment or the replacement of Royal Decree 116/1992 will need to take place. In line with the provisions of the Securities Market Act since its amendment, this law must definitively do away with the principle of assured delivery and the RRs, and must provide a detailed regulation of the new registration system for securities represented by book entry.

Secondly, it should be taken into account that in its fourth final provision the law provides that the measures required for the unification of the registration system for equity, fixed income, and government debt represented by book entry must be mandatorily adopted. Therefore it is necessary to repeal Royal Decree 505/1987, of 3 April, providing for the creation of a Book Entry System for Government Debt, which would be regulated, without prejudice to any necessary particularities, by Royal Decree 116/1992 or any law replacing it.

Thirdly, it would be advisable to repeal Decree 1506/1967, of 30 June, approving the Stock Exchange Regulation and, if appropriate, replace it with new legislation.

Fourthly, and depending on the wording of the future EC regulation, EMIR, it may or may not be necessary to enact a royal decree to develop the CCPs.

Finally, and in implementation of Article 86 of the Securities Market Act, a ministerial order and a CNMV circular should be published on the accounting rules and models to be followed by the financial statements of the CCPs and their consolidated groups, together with models of other kinds of reporting (on risks, ratios, margins, etc.) to be provided to the CNMV. It will also be necessary to review the current regulation applicable to Iberclear in these matters.

### 6.2 Internal rules of operation and administrative acts arising from the current reform

As well as the above-mentioned regulatory changes, the effective implementation of this reform also requires a number of internal rules to be approved by the various trading, clearing and settlement infrastructures, together with their corresponding administrative authorisations.

Both the setting up of the CCP and its internal operating rules must be duly authorised by the Ministry of the Economy and Finance, pending the reports referred to in Article 44 ter of the Securities Market Act. In turn, the CCP's regulation will require a great deal of circulars and other technical regulations. The approval of the CCP and its internal rules must be granted according to the procedure and requirements set forth in Community legislation if the application to set up the CCP is made after the Community legislation has come into force.

The Government must afford the consideration of "system" to any CCP which is established in accordance with Law 41/1999, of 12 November, on securities settlement and payment systems.

Once the administrative authorisation from the Ministry of the Economy and Finance has been received, pending the reports referred to in Article 44 bis. 4 of the Securities Market Act, Iberclear's rules must be changed. These changes will affect technical aspects to do with settlement and registry operations, especially with regard to stock market transactions cleared through one or several CCPs, the registry of securities, and the rules regarding finality, in accordance with Law 41/1999, of 12 November. In turn, these changes will require a large number of changes to circulars and operating instructions. In order to change the clearing, settlement and registry systems of the stock exchanges of autonomous regions it will be necessary to obtain authorisation from the relevant authority with competencies in securities markets in each of the autonomous regions.

The securities exchanges must draft their own rules, in which they must specify the CCP where they intend to clear their transactions and the CSD responsible for the settlement and registry of the securities. These stock exchange rules will also require the due administrative authorisation of the Ministry of the Economy and Finance or of the autonomous regions with competencies in the matter, in accordance with Article 31 bis of the Securities Market Act.

The interoperability agreements between the various trading, clearing and settlement infrastructures must be approved by all the supervisory authorities of the infrastructures involved.

Finally, it should be noted that, in its second final provision, the Law amending the Securities Market Act grants the CNMV the authority to supervise the technical changes necessary to undertake the reform of the current systems for the clearing, settlement and registry of securities traded on official secondary securities markets.

## 7 Situation of the reform project

Since February 2010, regular meetings have been held with representatives of the industry in an attempt to make the reform process as open as possible and so benefit from the industry's opinion. As a result of the progress made in this process, the project, undertaken in close collaboration with the Bank of Spain, has twice been submitted to public consultation and the proposed changes have been received positively. ${ }^{17}$

The entry into force of the legal text implementing the main changes heralded a period of intense work for all those involved in the process in order to make the necessary technical changes. For this purpose, the CNMV, in collaboration with the Bank of Spain and with the sector, set up a Coordination Committee to direct and guide the tasks to be undertaken and to ensure the development of the reform within the established time frame. The Committee is chaired by the Vice-President of the CNMV and includes representatives from the Bank of Spain, Iberclear, the securities markets and the employers' associations of savings institutions, savings banks, and investment firms. The Coordination Committee was responsible for the design of a work plan which was entrusted to Iberclear's Technical Advisory Committee (Spanish acronym: CTA). The latter committee was expanded for this purpose in order to make room for broader representation from the industry and its meetings were also attended by representatives from the Bank of Spain and the CNMV. All the technical issues were discussed in the CTA, and were later submitted to the Coordination Committee for their oversight and validation.

The necessary work and the changes to implement should ideally converge in time with the implementation of the European T 2 S platform.

## 8 Conclusions

Since its creation, the Spanish clearing, settlement and registry system has proven to be extraordinarily robust and secure. However, it has a number of particularities which may affect our system's capability to adapt to the integration and harmonisation processes in which EU post-trading systems are currently immersed. This is the main reason why the CNMV has led the reform of the Spanish clearing, settlement and registry system which is described in this article.

The two main changes introduced by the reform are the introduction of clearing services by one or several CCPs, which will enable the principle of assured delivery to be scrapped and the RR-based settlement and registry system to be eliminated and replaced by a balance-based system. This in turn prompts the introduction of new rules applicable to insolvency situations of the entities responsible for the registry of securities and their member entities. These modifications will bring the

[^52]current post-trading processes of the Spanish system more in line with European standards and practices. In light of this new scenario, supervisors will need to make a considerable effort to improve the coordination of their supervisory activity, especially by facilitating the transmission of data between regulators.

The reform process formally commenced in February 2010 with a public consultation in which the changes required to achieve the targets broadly set out in a joint report drafted in 2007 by the CNMV and the Bank of Spain were described and detailed. Since then, Iberclear's CTA has been working on the design of the reform and on its development and technical implementation under the guidance of a Coordination Committee chaired by the Vice-President of the CNMV, with the support of the Bank of Spain. In this task the CNMV is also aided by BME (Bolsas y Mercados Españoles, the Spanish stock exchange company) and the main participants of the clearing and settlement process. An important step in this process was the approval of Law 32/2011, of 5 October, amending the Securities Market Act, which provides legal certainty to the main changes called for in the reform. However, the entry into force of a large number of the rules of this law remains subject to the approval of the necessary regulatory developments, which will introduce new control mechanisms and liability and incident resolution rules in post-trading procedures.

The reform of the securities clearing, settlement and registry system is currently at a stage of definition and development of the new processes based on the two major pillars mentioned in the second paragraph of this section. Work on the system is progressing at a fast pace so as to have the new clearing and settlement system up and running before the start-up of $\mathrm{T}_{2} \mathrm{~S}$, which is expected to take place in September 2014, so that the Spanish post-trading system can be adapted to and be incorporated in this and other EU integration and harmonisation projects under the same conditions as other jurisdictions.

## Amendments to Law 35/2003 on Collective Investment Schemes

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## 1 Introduction

Law 31/2011, of 4 October, which modifies Law 35/2003, of 4 November, on Collective Investment Schemes (hereinafter CIS) entered into force on 6 October 2011. This article describes and analyses the main new aspects introduced by this Law relating to the rules and procedures for authorisation and registration of CIS.

The aim of Law 31/2011, as indicated in its preamble, is to begin the transposition of EU Directives 2009/65/EC (UCITS IV Directive) ${ }^{1}$ and 2010/78/EU (Omnibus I Directive), ${ }^{2}$ as well as to introduce other amendments aimed at strengthening the competitiveness of the CIS industry within the context of greater integration and competition. The reform of the CIS Act also aims to establish measures for optimising the supervision of CIS and their management companies by the CNMV.

The main new aspects of the UCITS IV Directive and its implementing legislation ${ }^{3}$ were presented in an article published in the CNMV Bulletin corresponding to the second quarter of 2010. ${ }^{4}$ In particular, the measures which have the greatest impact on the authorisation and registration of CIS include the following:

- Simplification of the regime for issuing the Community passport for cross--border marketing of CIS.
- Providing a regime for cross-border operations of CIS management companies, which are allowed to manage funds established in another Member State of the European Union.

[^53]- Regulation of a new information instrument for CIS entitled "key information document" (hereinafter KID), as a substitute for the previous simplified prospectus.
- Providing a regime for mergers of CIS and master-feeder structures.

Similarly, an analysis of the main amendments introduced by the Omnibus I Directive can be found in another article published in the CNMV Bulletin corresponding to the third quarter of 2011.5 In particular, the aforementioned article highlights the configuration of the new European Securities and Markets Authority (hereinafter ESMA) and the CNMV's obligation to send it information, in the context of cooperation between supervisors, relating to the rejection of authorisations for certain CIS and CIS management companies. The article also highlights the capacity of ESMA to conduct binding mediation between the competent authorities of different Member States.

With regard to the other amendments introduced by Law 31/2011 not relating to adapting to EU directives, we should point out the possibility of using global accounts for marketing in Spain of CIS domiciled in Spain and the possibility of assigning part of the assets included under the total net assets of the CIS as collateral, as well as other measures aimed at reducing administrative charges and making procedures more flexible.

The rest of the article is structured as follows. Sections 2 and 3 address the new aspects relating to cross-border marketing and operations of CIS and management companies respectively. Section 4 deals with the KID, that is, the new document which substitutes the simplified prospectus. Section 5 reviews the improvements introduced by the reform of the CIS Act with regard to mergers of CIS. Finally, section 6 analyses other amendments of the CIS Act.

## 2 Cross-border marketing of CIS

The UCITS IV Directive and its implementing legislation regulate a new procedure for communication between competent authorities and the CIS with regard to the passport for cross-border marketing of CIS, which comply with said Directive so as to facilitate their access to the markets of other Member States. Law 31/2011, through amending Article 15 of the CIS Act relating to marketing in Spain of the shares and units of foreign CIS and, at the same time, amending Article 16 of the aforementioned Law relating to the marketing of Spanish CIS within the European Union, begins the transposition of the above-mentioned regulation.

The main new aspect introduced by Law 31/2011 is that CIS no longer inform the CNMV of the passport because a simpler procedure has been established. This procedure is much faster and is based on communication between competent

[^54]authorities and involves a much more limited role for the competent authority in the host State.

Accordingly, the CIS authorised in another Member State of the European Union sends the "notification letter" to the competent authority of the home Member State, with information on the provisions and arrangements for marketing in Spain, and the documentation of the CIS. It will be possible to market the CIS in Spain from the moment when said authority communicates to the CIS that it has sent said documents to the CNMV, together with the attestation that the CIS meets the conditions imposed by the Directive. The documents therefore no longer require a visa stamp.

Another new aspect is that, in accordance with the directive, the document with the key investor information (KID) must be filed in Spanish, but the other documentation may be filed in Spanish or in English. In addition, the CIS will be responsible for translating the information, and hence a sworn translation into Spanish is no longer necessary.

The CIS shall communicate the modifications and updates of the documentation necessary to obtain the passport directly to the CNMV and will indicate where the documents may be obtained in electronic format. It shall also provide investors located in Spain with all the information and documents which must be provided to investors in the home Member State, pursuant to legislation in that State.

It is no longer necessary to file the marketing memorandum with the CNMV, but according to Circular $2 / 2011^{6}$, it must be provided to the investor prior to subscription in the format established on the CNMV's website.

In addition, the second final provision of Law 31/2011 includes new tax obligations for CIS with a Community passport through which a regulation may be established for designating an entity responsible for the centralised registration of the investors channelled through the distributors in Spain. This entity will be required to carry out the withholdings or interim payments and inform the tax authorities in accordance with tax legislation.

Finally, marketing in Spain of CIS which are not authorised in accordance with the UCITS IV Directive will require filing of the key information document with the CNMV and said document must be provided to investors.

## 3 Cross-border operations of CIS management companies

One of the most significant new aspects of the new Law, resulting from the transposition of the UCITS IV Directive, is the functioning of the "Community passport" of the CIS management companies, which allows them to manage and register CIS in another Member State without the need to use a delegate, as had been the case

[^55]before the new regulation entered into force, both in the form of a branch and under free provision of services.

In this regard, Law 31/2011 introduces changes and improvements which affect the notification of the passport, the regime for supervising cross-border operations, cooperation and information exchange between competent authorities.

### 3.1 Notification of the passport

With regard to passport notification, the Spanish management companies which wish to operate in another Member State (Article 54 of the CIS Act on cross-border operations of management companies authorised in Spain) must send the CNMV, to be in turn passed on to the host Member State, a notification together with a description of the risk management procedures, the procedures and measures adopted to respond to complaints and claims in the language or in one of the official languages of the home Member State of the fund or company, as well as the procedures for informing investors and the supervisory authority of the home Member State of the CIS. 7 In addition to the aforementioned information, when the management company is going to perform management, administration and representation of the CIS, the new Law requires that the CNMV send the supervisor of the host State an attestation that the management company has been authorised in accordance with the UCITS IV Directive, the scope of the authorisation and the type of collective investment schemes which it may manage, as well as any restrictions with regard to said schemes. Similar requirements are established for the cross-border operations of EU management companies in Spain (Article 55 of the CIS Act on management companies authorised in another Member State of the European Union).

### 3.2 Cross-border supervision

Law 31/2011 strengthens the supervision powers of the authorities of the Member States as it grants them powers over the rules for establishing and operating the CIS registered in those States (Article 71 of the CIS Act on the supervision of entities from other Member States). Specifically, the most significant aspects of the new supervisory regime are as follows:

- The competent authorities in the host Member States shall verify compliance with applicable legislation and may require information for statistical purposes. In particular, when a management company conducts the management, administration and representation of CIS in another State, it will be responsible for adopting the organisational provisions necessary to guarantee that the CIS complies with applicable rules and their instruments of incorporation.
- If the management company fails to meet its obligations and does not adopt measures, the host State, after informing the authority of the home State, may

[^56]adopt measures to prevent new breaches, including exercising the power to impose sanctions. Alternatively, if it believes that the home State has not acted correctly, it may inform ESMA so that it may act in accordance with the powers granted to it by Article 19 of Regulation (EU) 1095/2010, ${ }^{8}$ pursuant to which it may assist authorities in reaching an agreement.

- Under exceptional circumstances, the host State may adopt preventive measures to protect the interests of investors and must inform ESMA of said measures.


### 3.3 Cross-border co-operation between Member States

In addition, Law 31/2011 regulates co-operation between authorities and the exchange of information between them and establishes new requirements with the aim of ensuring that CIS and management companies follow the provisions of the UCITS IV Directive (Article 71 (3) of the CIS Act: Cross-border co-operation between competent authorities). For its part, Regulation (EU) 584/2010,9 directly applicable as from 1 July 2011, establishes the procedure for on-the-spot verifications and investigations and the exchange of information. For this purpose, the Law provides the following co-operation mechanisms:

- The authorities of the Member States must provide all the information necessary for the investigation and supervision activities of other States and provide ESMA with the information which it requires to fulfil its duties.
- The authorities of the Member States may request cooperation from another State in supervision activities for an on-the-spot verification or investigation in the territory of the other Member State, for which they must accept that staff from the requested authority may be present in said activities.

If the request for co-operation in an on-the-spot investigation or verification, for authorisation for its staff to accompany the staff of the requested Member State in its actions or that aimed at exchanging information is rejected or has not been processed within a reasonable time period, the authorities of the Member States may request the mediation of ESMA for it to act in accordance with the powers granted to it by Article 19 of Regulation (EU) 1095/2010.

## 4 Documents with key investor information

With regard to the prospectus which entities must prepare for dissemination amongst shareholders, unit-holders and the general public, the most important new

[^57]aspect introduced by Law 31/2011, through amendment of Article 17 of the CIS Act, is the substitution of the current simplified prospectus of the CIS for the "key information document" (KID). Similarly, as a result of the disappearance of the simplified prospectus, the "full prospectus" is now simply referred to as the "prospectus".

The fourth additional provision of the CIS Act ${ }^{10}$ establishes that, for those CIS which comply with the UCITS IV Directive, the simplified prospectus will be replaced by the KID by 1 July 2012. For those financial CIS (except hedge funds and funds of hedge funds) which do not comply with the aforementioned Directive, the KID will be required for newly created CIS or for those existing CIS whose prospectus is updated at the request of the entity.

The new wording of Article 17 of the CIS Act also includes a very brief mention of the content and features of the KID. Specifically, this document must provide information about the identification, objectives and investment policy of the CIS, its historic returns (or return scenarios, as the case may be) and associated costs and expenses, as well as a risk and remuneration profile of the investment. In addition, it indicates that the KID will be considered as pre-contractual information, its data will be impartial, clear and not misleading and it will be consistent with that specified in the prospectus.

The KID should be written in a concise manner and in non-technical language and shall be presented in a common format, allowing for comparison, so that it may be easily analysed and understood by the average investor. The aim is that the investor is in a reasonable condition to understand the essential characteristics, nature and risks of the investment product offered and to make well-grounded investment decisions without the need to refer to other documents.

In line with the above, Article 10 of the CIS Act establishes that authorisation of investment companies and funds shall require, inter alia, filing of the KID with the CNMV, as a replacement for the simplified prospectus. In addition, Article 12 of the Law establishes which modifications of the KID of investment funds must be communicated to the unit-holders prior to their entry into force so that they may exercise their right of withdrawal.

With regard to the marketing in Spain of foreign CIS (Article 15) and Spanish CIS abroad (Article 16), the KID is also referred to among the documentation which shall be provided to investors located in Spain and the documentation which must be sent to the CNMV if the aim is to market the shares or units in the European Union.

Finally, Article 18 of the CIS Act, relating to information provided to unit-holders and shareholders, the general public and advertising, indicates that the KID, together with the latest available half-yearly report, must be provided free of charge to subscribers sufficiently in advance of the subscription of units or shares. The KID

[^58]may be provided on a hard copy or through the website of the investment company or the management company.

## 5 Mergers of CIS

Law 31/2011 has introduced a series of technical improvements in the area of mergers aimed at increasing the flexibility of administrative processes and making the process similar to that for the merger of companies and investment funds, postponing the transposition of Directives $65 / 2009$ and $44 / 2010$ relating to cross-border mergers to the amendment of the regulation which implements the CIS Act.

The main new aspects of Law 31/2011, contained in Article 26 of the CIS Act, focus on the following areas: with regard to mergers, the classification of merger through the creation of a new scheme is extended to mergers between CIS of a different legal nature. Therefore, following this modification, funds may merge with investment companies through the creation of a new scheme, whether this has the form of a fund or an investment company. These new aspects are described in greater detail below.

### 5.1 Mergers between investment companies

It is in the mergers between investment companies that the most significant changes will take place. Unlike the previous wording of Article 26 of the CIS Act, which simply referred generically to the regime for mergers of public limited companies contained in the Public Limited Companies Act, the new Article 26 adapts the merger procedure to the particular nature of investment companies, giving special importance to their nature as collective investment vehicles as opposed to the general condition as public limited companies.

Accordingly, the first new aspect consists of sending the request for authorisation of the merger to the CNMV when the respective boards of directors of the companies involved approve the common merger project, prior to its filing in the Companies Registry. This significantly speeds up the authorisation process as previously the request for authorisation was sent to the CNMV once the project had been filed in the Companies Registry and the merger approved by the respective General Shareholders' Meetings of the merging companies.

Another new aspect is the requirement for an individualised communication to the shareholders of the companies, once the operation has been authorised by the CNMV. This communication must include suitable and accurate information about the planned merger and must be carried out once the merger project has been filed in the Companies Registry and will be performed by means of a procedure which ensures receipt by the shareholders at the address which appears in the company's documentation.

Finally, it should be pointed out that the new Law has modified the moment for setting the definitive swap ratio, which is now determined based on the net asset
values and the number of outstanding shares on the day prior to the execution of the public merger document.

This regime is more consistent with the condition of investment companies of collective investment schemes which comply with the obligation to make a daily calculation of their net asset value. In accordance with the above, the respective General Shareholders' Meetings will no longer approve the definitive swap ratio, but rather the method of calculation, thus avoiding the risk of arbitrage over the shares of the companies involved which could take place between the dates that the swap ratio is set and the effective date for executing the merger.

### 5.2 Mergers between investment funds

The new aspects relating to mergers of investment funds include the following three points.

Firstly, the merger procedure will begin by means of the agreement of the management company, which eliminates the obligation for the depository to also agree to it, and it will be not necessary that it is provided to the CNMV as part of the documentation for authorising the operation.

Secondly, the regime for advertising the authorisation of the merger process had been recently amended by Law $2 / 2011,{ }^{11}$ so as to include, as an alternative possibility to the publication in two national newspapers, its dissemination on the website of the respective management companies. Law 31/2011 extends this option to publication on the website of entities which form part of the management company's group. This facilitates publication for those management companies which do not have their own website and which use the website of their parent company.

Finally, the new Law amends the minimum period for carrying out the merger, which is increased from one month to 40 days counting from the communication to the unit-holders and the corresponding publications. Calendar days will be used for this calculation as this is a civil time period and not an administrative time period.

### 5.3 Mixed mergers

With regard to mixed mergers between funds and investment companies, the content of the first paragraph of Article 34.2 of the CIS Regulation is raised to the level of law. This paragraph establishes that funds will adhere to the CIS Act and its implementing legislation and companies to Law 3/2009, ${ }^{12}$ but includes the new aspects that the implementing legislation may establish exceptions. The regulation may therefore exclude compliance with certain requirements set by Law 3/2009 for public limited companies as a whole or establish that they are not applicable or that they are difficult to match with a collective investment scheme.

[^59]
## 6 Other amendments

In addition to the amendments to the CIS Act relating to the transposition of EU directives, referred to in the points above, we should also point out several new aspects introduced by Law 31/2011 aimed at reducing the administrative charges and increasing the flexibility of procedures. These aspects are analysed below.

### 6.1 Prior authorisation of the CNMV

Law 31/2011 reduces the maximum period for notifying the authorisation of the CNMV to two months, except in the case of self-managed SICAV (investment companies), for which the three-month period is maintained. The basis for calculating this deadline is the receipt of the request by the CNMV or the moment at which the required documentation is completed (Article 10.3 of the CIS Act).

When the request for authorisation for creating a CIS has been filed by a CIS management company authorised in another Member State of the EU pursuant to the UCITS IV Directive, before rejecting the request, the CNMV shall consult the competent authorities of the home Member State of the CIS management company and every year shall inform the European Commission and ESMA of the number and nature of the rejections (Article 10.4). Under no circumstances shall authorisation of the CIS be subject to the CIS management company being domiciled in Spain or that it exercises on its own behalf or delegates the exercise of some activities in Spain (Article 11.4 of the CIS Act).

### 6.2 Right of information or withdrawal of the unit-holder

Law 31/2011 changes the context for amending the management regulation, prospectus or KID which involves the accrual of the right to information or withdrawal of the unit-holder prior to its entry into force (Article 12.2 of the CIS Act). Accordingly, it incorporates as a reason for accrual of that right, modifications in the frequency with which the net asset value is calculated, the transformation of a CIS by compartments or in compartments of other CIS and the change of control of the depository.

In addition, in order to speed up the change of the depository, it provides the possibility of filing the change in the registers of the CNMV prior to communication to unit-holders when it occurs as a result of unexpected company operations or those which are subject to the verification of other bodies.

Finally, it specifies that, in the case of listed investment funds, that right will be exercised in the market which is designated in the prospectus for the class of unitholder, with the latter bearing the ordinary expenses arising from the stock market operation corresponding to exercising the right.

### 6.3 Creation of unit-holder classes

The possibility of creating classes of unit-holders and series of shares which make it possible, among other advantages, to optimise the expenses of the CIS or its
compartments is provided in the CIS Act (Articles 7.1 and 9.3). Law 31/2011 now provides, as a differentiating element, not only the fees which are applicable to them, but also, inter alia, the currency denomination and the policy for distributing the profit.

Furthermore, it removes the accrual of the right to information or withdrawal of unit-holders for the creation of new classes of units for CIS registered prior to the entry into force of the CIS Act. This eliminates the discriminatory treatment included in the previous fifth transitory provision of the CIS Act.

### 6.4 Communication to unit-holders

Law 31/2011 provides the possibility of carrying out the communications to unitholders or shareholders required by the CIS Act and its implementing legislation by telematic means provided this is expressly requested by the investor (Article 22 bis of the CIS Act).

The dissemination of the prospectus and the KID among investors still requires prior registration by the CNMV, although prior verification by the CNMV of the prospectuses of investment funds is limited (Article 17.6 of the CIS Act).

### 6.5 Transformation of CIS

With the aim of reducing the costs and administrative procedures associated with transforming CIS, Law 31/2011 eliminates the requirements for prior authorisation by the CNMV in the case of the transformation of SICAV (investment companies) into companies which do not hold that status, and for filing the auditors' report with the CNMV when the transforming entity is the CIS (Article 25 of the CIS Act).

Similarly, in the case of a SICAV, the obligation to publish the transformation agreement in the BORME (Official Gazette of the Companies Registry) is passed from the CIS management company to the companies' registrar, which will automatically send it telematically without any additional cost. In addition, it offers alternatives to publishing the agreement in two widely-circulated newspapers. These alternatives are publication on the website of the SICAV or its CIS management company, or written communication to all the members through a procedure which ensures receipt.

### 6.6 Obligations of the depository

Law 31/2011, in the same way as the UCITS IV Directive, does not regulate the issue of a Community passport for depositories and it is still required that the depositories have their registered address or, as the case may be, a branch in Spain (Article 58.1 of the CIS Act). However, if the home Member State of the depository of a CIS is different from the home Member State of its CIS management company, and if the latter has been authorised in accordance with the aforementioned Directive, the depository is required to sign a written agreement with the CIS management company which regulates the flow of information necessary for the former to carry out its obligations and functions provided by law (Article 60 bis of the CIS Act).

## 7 Conclusions

The amendments introduced in the CIS Act by Law 31/2011 involve, firstly, transposing Directive 2009/65/EC and its implementing legislation relating to the regime for cross-border marketing of CIS within the EU and cross-border operations of CIS management companies. A key aspect in this area is the introduction of the KID, an investor information document with the key information on the CIS which are authorised in accordance with this Directive. The KID has a standardised design throughout the EU.

Furthermore, other amendments have been introduced with the aim of: (i) strengthening the competitiveness of CIS, envisaging the possibility of using global accounts for their marketing in Spain and of assigning part of their assets as collateral; (ii) protecting the rights of unit-holders, including new amendments which involve the accrual of their right to information; (iii) reducing the administrative charges of CIS management companies, speeding up communications to unit-holders and partially amending the regime for the transformation and merger of CIS; (iv) increasing the flexibility of administrative procedures, reducing the maximum time periods for notifying the prior authorisation of the CNMV; and (v) optimising the supervision of the CIS, requiring the depository to establish an agreement with the CIS management company in the event that it does not belong to the same Member State.

IV Legislative Annex

New legislation approved since publication of the CNMV Bulletin for the third quarter of 2011, in chronological order, is as follows:

- Royal Decree 1307/2011, of 26 September, which amends Royal Decree 437/2010, of 9 April, which implements the regulation of the securitisation process of the electricity system deficit.

This Royal Decree amends Royal Decree 437/2010, of 9 April, for determining the price conditions for assignment of the time differences of payments of the electricity system taking place in 2010.

It also increases the flexibility of the procedure for competitively issuing financial instruments. In this regard, it introduces the possibility of private placements of securities, which will allow the Securitisation Fund of the Electricity Sector Tariff Deficit to make use of this type of funding and help to achieve the general aim of minimising funding costs over the life of the Fund. In order to guarantee the two-fold aim of minimising prices and making competitive issues, it establishes that private placement will involve choosing one or several underwriting entities individually by means of the competitive procedure based on criteria such as time period, price and volume to be underwritten.

Finally, it establishes the Inter-ministerial Commission, which aims to ensure correct compliance with the conditions for executing the tasks assigned to the Management Company of the Securitisation Fund for approving the price of the private placement of financial instruments and to select the underwriting entities of said operations.

- Law 31/2011, of 4 October, which modifies Law 35/2003, of 4 November, on Collective Investment Schemes.

This Law aims to initiate transposition of Directive 2009/65/EC, of the European Parliament and of the Council, of 13 July 2009, on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities, which simplifies the regime for cross-border marketing of Collective Investment Schemes (hereinafter CIS), and Article 11 of Directive 2010/78/EC, of the European Parliament and of the Council, of 24 November 2010, which partially amends Directive 2009/65/EC. This transposition will be completed with the implementing legislation, and amends Law 35/2003, of 4 November, on Collective Investment Schemes.

Within the first set of new aspects, this Law introduces into Law 35/2003 the provisions necessary (applicable legal regime and supervision powers) for correct functioning of the passport of the management company for managing funds. Spanish management companies may manage funds domiciled in other Member States, and management companies from other Member States may manage Spanish funds. In addition, it simplifies the regime for cross-border marketing, which will now involve notification between competent authorities of the application of the management company and only the competent authority of the home Member State will verify compliance with the necessary requirements. This therefore speeds up access to other markets.

A second set of amendments is aimed at strengthening investor protection. The Law strengthens the mechanisms for cooperation, consultation and exchange of information between competent supervisory authorities. In addition, the Law introduces a new information document: "key investor information document", which substitutes the previous simplified prospectus and which includes two new aspects. Firstly, it fully adapts this document to the aim of making harmonised funds and companies from any Member State perfectly comparable. The information will be presented concisely and in a manner which is easily understandable for the investor. This document must therefore only contain the essential information for adopting well-grounded decisions.

A further raft of aspects included in the Law involves reforms aimed at increasing the competitiveness of the sector within the context of greater integration and competition. Accordingly, it introduces the possibility of using global accounts for marketing in Spain of funds domiciled in Spain, thus eliminating the discrimination compared with foreign CIS which have long been using this marketing mechanism. With the same aim, Law 35/2003 is amended so as to allow the possibility that CIS may assign part of the assets which they hold as collateral, thus improving their funding possibilities.

Finally, the Law introduces additional mechanisms in order to facilitate and strengthen the CNMV's supervision, as well as technical improvements aimed at greater legal security.

- Law 32/2011, of 4 October, which amends the Securities Market Act 24/1988, of 28 July.
(See the specific article in this Bulletin on the reform of the Spanish securities clearing, settlement and registration system)
- Law 38/2011, of 10 October, on reform of Bankruptcy Act 22/2003, of 9 July.

The need to reform the Bankruptcy Act results from the fact that the current worsening economic situation has highlighted certain dysfunctional aspects of current legislation and has shown one of the main objectives of the Law - maintaining the professional business activity of the insolvent party - has not been met

This is a comprehensive reform which introduces a series of significant amendments which aim to correct the errors of approach detected in practice, as well as to cover certain gaps in the previous regulation. These amendments include the following:

- Greater depth is given to the alternatives to bankruptcy, or pre-bankruptcy proceedings, offering companies a faster and more economical method for solving the crisis through re-financing agreements. In this regard, the Law addresses the formal communication to the competent court that negotiations are being undertaken with the creditors. It fully regulates the duties of the negotiating parties in the agreement and, mainly
establishes the judicial certification of said agreement so that, providing it meets certain requirements, the re-financing agreements form part of the acts which cannot be rescinded. In this regard, it clarifies that only the official receiver may exercise any action for rescission and any other challenges. Subsidiary standing will not be applicable to creditors for exercising said actions.

It also incorporates into Spanish law the "privilege of fresh money", included in Article 84, with the aim of providing liquidity to the company which has re-financed its debt, favouring the granting of credit to companies in the agreement stage. Accordingly, " $50 \%$ of the loans which involve new cash inflows and which have been granted within the framework of a re-financing agreement" are considered as claims against the estate, thus establishing a protection mechanism for such "new money".

- With the aim of fostering the conservative solution of the bankruptcy proceedings, it also establishes the possibility of carrying out structural modifications during the pre-bankruptcy phase and allows the acquisition of bankruptcy claims, which will include the right to vote at creditors' meetings when the acquirer is an entity subject to financial supervision.
- So that the insolvency solution is not delayed, the Law simplifies and speeds up the bankruptcy procedure, bringing forward the settlement, promoting a truly shortened bankruptcy procedure, offering specific solutions in the common stage and in the agreements and improving the regime for filing the bankruptcy in the registries.
- One aim is to provide greater professionalism to receivers. Consequently, the receivership functions are enhanced and the requirements for being appointed as a receiver are strengthened.

Following this line, the Law extends the circumstances in which the receiver is made up of one single member, not only limiting this to shortened bankruptcy procedures. This has a positive impact on the functioning of the receiver and also reduces the costs arising from the bankruptcy.

It also recognises the possibility that a legal entity may be appointed as a receiver (e.g. a professional company) so that this function may be carried out by a range of professionals with the necessary training and experience.

- Finally, the Law aims to specify the legal regime of certain specific aspects of the bankruptcy proceedings. Accordingly, it resolves certain legal doubts regarding the classification of claims against the estate of the salary debts and compensation in the event of dismissal or termination of the work contract. It sets the payment order of the claims when the estate is not sufficient to fully cover all claims, it amends the regulation of the related bankruptcy proceedings, etc.
- Royal Decree-Law 16/2011, of 14 October, which creates the Credit Institutions' Deposit Guarantee Fund.

The two main aims of this Royal Decree-Law are:

- Unification of the three deposit guarantee funds currently existing (banks, savings banks and credit co-operatives) into one single Credit Institutions' Deposit Guarantee Fund. This new Guarantee Fund takes the legal place of the three dissolved funds and hence maintains the functions and features of the three funds which it substitutes.
- The increase in contributions from credit institutions up to two per thousand of their guaranteed deposits (although this may rise up to three per thousand), with the aim that the Credit Institutions' Deposit Guarantee Fund contributes more to the restructuring process of financial institutions.
- Regulation (EU) No. 1227/2011, of the European Parliament and of the Council, of 25 October 2011, on wholesale energy market integrity and transparency.

This Regulation aims to guarantee greater integrity and transparency in wholesale energy markets by establishing a suitable legislative framework which, bearing in mind the specific conditions of the sector not covered by other directives and regulations, prevents market abuse and manipulation.

Abusive practices in the energy market have a significant impact as these wholesale energy markets include both the commodities market and the derivatives market. Similarly, it is important to bear in mind that they have a cross-border effect on the wholesale prices of electricity and natural gas and also affect the retail prices to be paid by consumers and micro-companies. However, to date, the practices for controlling the energy market have been specific for each Member State in the sector, which, due to the multiple jurisdictions which these commercial activities may be subject to, has generated a lack of clarity and even loss of control. Hence, Regulation No. 1227/2011 aims to establish a harmonised regulatory framework so as to guarantee transparency and integrity in wholesale energy markets.

Accordingly, in order to ensure this integrity and transparency, the Regulation establishes the definitions of insider trading and market manipulation, which constitute market abuse, so that they are compatible between derivatives and commodities markets. It also expressly prohibits insider-trading, as well as the manipulation, or attempts at manipulation, of wholesale energy markets.

Along the same lines, this regulation establishes the requirement for market participants to disclose in an effective and timely manner inside information which they possess.

In order to detect and prevent market abuse in wholesale energy markets, the Agency for the Cooperation of Energy Regulators is entrusted with controlling the market as it has the necessary knowledge on the functioning of said markets and networks within the European Union. However, close cooperation
and coordination is required between the Agency and national authorities so as to guarantee suitable control. It also introduces certain harmonisation of the penalty system.

- Order EHA/2899/2011, of 28 October, on transparency and protection of bank customers.

This legislation aims to guarantee a suitable level of protection for the customers of credit institutions (natural persons), by implementing measures for transparency in the provision of banking services. The commissions and interest rates applicable to banking services will be those set freely by the parties, while the Order will regulate those aspects relating to their advertising and pre-contractual and contractual information, and includes in its annexes specimen models of the Pre-Contract Information Sheet (FIPRE), Personalised Information Sheet (FIPER) and specific sheets for reverse mortgages. The information on interest rate "floor and ceiling" clauses will be included in an annex to the FIPER.

Similarly, the Bank of Spain will establish a unified document for credit institutions to carry out annual communications on commissions and expenses accrued and interest rates effectively applied to each banking service provided to the customer over the previous year. With regard to related banking services, the credit institutions must expressly inform the customer in an understandable manner about the possibility, or not, of contracting each service independently and under what conditions.

- Royal Decree 1517/2011, of 31 October, which amends Royal Decree 1517/2011, of 31 October, which approves the Regulation which implements the consolidated text of the Account Auditing Act, approved by Legislative Royal Decree 1/2011, of 1 July.

This regulation implements those aspects which define the activity of account auditing, which comprise a body of modern regulation, and which define and specify the public supervision system attributed to the Institute of Accounting and Account Auditing (ICAC), which is fully inserted within an international context, and its effective implementation.

It provides compliance with the legal mandate of defining entities of public interest due to their special activity or size. It thus includes entities which are under the supervision of the Bank of Spain, the CNMV, and the Directorate--General of Insurance and Pension Funds as they are authorised to raise funds from the public for carrying out certain marketing and investment activities. It also includes collective investment schemes and pension funds above a certain number of unit-holders. In addition, it includes those entities with assets of over 200 million euros or with over 1,000 employees. The Account Auditing Act imposes a raft of stricter obligations or controls on the auditors of these entities, while the regulation specifies the content of the annual transparency report which they must issue.

The regulation specifies the regime for access or legal qualification for practising auditing. Together with the regime for ordinary access, it implements the
access regime through other routes, such as that applicable to certain personnel working for the public authorities which carry out public functions involving auditing or revision or control of audits. In addition, it also regulates other aspects such as the obligation for ongoing training and the legal regime for auditor independence.

It is also important to point out the incorporation of an express prohibition on limiting the distribution or use of the audit report, as well as the implementation of the legally established power not to issue the audit report and to resign from the audit engagement, setting the criteria which must be followed as well as the line that separates said power from the obligation to issue a report with a disclaimer of opinion.

- Legislative Royal Decree 3/2011, of 14 November, which approves the consolidated text of the Public Sector Procurement Act.

This consolidated text complies with the authorisation contained in the $32^{\text {nd }}$ final provision of the Sustainable Economy Act 2/2011, of 4 March, for drawing up the consolidated text relating to public procurement.

It has included in one single text all the amendments introduced to Law 30/2007, of 30 October, all of which have been duly regulated, clarified and harmonised. It has also included in the text the current provisions relating to the raising of private funding for executing public contracts.

- CNMV Resolution of 16 November 2011, which creates and regulates the CNMV's Electronic Register.

This Resolution creates the CNMV's Electronic Register and its implementation aims to determine the procedures of its competence, in which it provides the service of the electronic register for receiving and sending the corresponding documents, as well as the general conditions for presenting standardised documents.

Within its scope of application, use of the Electronic Register will be mandatory in the requests, documents and communications with citizens which, in accordance with general rules, must be entered in the registers in accordance with the provisions of Article 38 of Law 30/1992, of 26 November, on the Legal Regime of Public Administrations and Common Administrative Procedure and its implementing legislation. It is not possible to substitute this record for others in non-electronic registers or in the registers of computer applications which manage the services, procedures and processes.

- CNMV Agreement of 16 November 2011, relating to the adaptation of the CIFRADOC/CNMV System to the certification and recognised electronic signature services and creation of the CNMV's Telematic Register.

It repeals the Agreement of 15 September 2006, of the CNMV's Board, relating to the adaptation of the CIFRADOC/CNMV System to the certification and
recognised electronic signature services and it creates the CNMV's Telematic Register.

- CNMV Circular 4/2011, of 16 November, which partially amends 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.

CNMV Circular 4/2011, of 16 November, partially amends Circular 4/2008, of 11 September. This amendment is necessary as a result of the substitution of the simplified prospectus by the Key Information Document (hereinafter, KID) as a consequence of European Directive 2009/65/EC (UCITS IV Directive) and its implementing legislation, which makes it necessary to adapt the content of the periodic public information so as to match that to be included in the KID.

Specifically, a new definition is given to the expense ratio and it establishes that the management fee over results must be communicated independently. In addition, the KID requires that a chart is published with the historic return of the CIS, which, although it does not form part of the periodic public information, will be presented together with said information. Accordingly, the expense ratio and the management fee over the result of the previous year, as well as the chart of the historic return which are sent in the periodic public information of the second half of the year will be incorporated into the KID annually with the aim of updating the information contained therein.

In order to adapt Circular $4 / 2008$ to the Regulation of Collective Investment Schemes, management companies are required to inform about the existence of costs arising from the analysis service, about the circumstances and about other relevant information which has led, as the case may be, to the creation of a CIS or special-purpose compartment, as well as, in the case of the dissolution or liquidation of Real Estate Investment Funds, about the most significant aspects of this process.

In order to adapt to CNMV Circular 6/2010 on derivative instruments, an amendment is made to the format of the periodic information of the CIS for it to include the information requirements for CIS included in the aforementioned Circular. Accordingly, it must indicate the method chosen for measuring the total exposure to market risk, the levels of maximum, minimum and average VaR, as well as the leverage at the end of the reference period.

- Directive 2011/89/EU, of the European Parliament and of the Council, of 16 November 2011, amending Directives 98/78/EC, 2002/87/EC, 2006/48/EC and 2009/138/EC as regards the supplementary supervision of financial entities in a financial conglomerate.

Directive 2002/87/EC grants the competent authorities of the financial sector powers for additional supervision of groups made up of several regulated entities which operate in different sectors of the financial markets (financial conglomerates). It places special attention on the potential risks of double gearing (multiple use of capital) and group risks (risks of contagion, management complexity, concentration and conflicts of interest).

Directive $2011 / 89 / E U$ considers that it is necessary for financial conglomerates to identify themselves throughout the Union based on the level of risk exposure based on common guidelines. Hence, the competent authorities must coordinate the additional supervision of financial conglomerates which operate internationally, preparing guidelines aimed at the convergence of supervision practices and drafting regulatory technical standards. In this regard, for the purposes of the stress tests, additional parameters may be developed which consider the specific risks associated with financial conglomerates.

The activities of a group are mainly carried out in the financial sector when the total balance sheet of the entities of the group's financial sector, whether regulated or not, and the total balance sheet of the group together, are greater than $40 \%$. This Directive determines that asset management companies and managers of alternative investment funds shall be added to the sector to which they belong within the group and, if they do not belong exclusively to a sector within the group, will be added to the smallest financial sector.

In order to calculate the capital adequacy requirements, the scope of additional supervision covers: (a) credit institutions, financial institutions and firms providing auxiliary services; (b) insurance companies, re-insurance companies and insurance portfolio companies; (c) investment companies; and (d) mixed portfolio financial companies. "Mixed portfolio financial companies" are defined as a parent company which is not a regulated entity and which, together with its subsidiaries, constitutes a financial conglomerate.

Alternative investment fund managers are included in the additional supervision. The Member States are responsible for determining or empowering their government authorities to decide on what sectoral standards are included (banking sector, insurance sector or investment services sector).

In the case of companies which carry on banking or insurance activities, the regulators may apply the specific legislation of these two sectors or, additional supervision, to the parent company. Currently, supervisors must choose only one type of standard to be applied when a conglomerate enters into a new sector. However, legislation will allow States to apply exceptions to those companies which are too small to affect the market.

- CNMV Circular 5/2011, of 12 December, which amends Circular 12/2008, of 30 December, on solvency of investment service firms and their consolidatable groups, and Circular 7/2008, of 26 November, on accounting standards, annual accounts and statements of reserved information of investment services firms, management companies of collective investment schemes and management companies of venture capital firms.

This Circular aims to amend Circular 12/2008 on rules relating to solvency, and Circular 7/2008 on rules related to accounting, both applicable to investment service firms and their consolidatable groups. With regard to solvency, amendments are made to the concepts relating to elements which make up own funds (shares and preferred shares, hybrid instruments, etc.), large risks, the trading book and internal forms for these purposes and, finally, remuneration
policies. With regard to accounting, rules are included relating to business combinations and accounting consolidation.

It partially incorporates into Spanish law Directive 2009/111/EC, of the European Parliament and of the Council, of 16 September 2009, amending Directives 2006/48/EC, 2006/49/EC and 2007/64/EC as regards banks affiliated to central institutions, certain own funds items, large exposures, supervisory arrangements, and crisis management, and Directive 2010/76/EU, of the European Parliament and of the Council, of 24 November 2010, amending Directives 2006/48/EC and 2006/49/EC as regards capital requirements for the trading book and for re-securitisations, and the supervisory review of remuneration policies. This circular will enter into force on 1 January 2012.

V Statistics Annex

## 1 Markets

### 1.1 Equity

Share issues and public offerings ${ }^{1}$
TABLE 1.1

|  | 2008 | 2009 | 2010 | 2010 | 2011 | II | III | IV ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| CASH VALUE ${ }^{3}$ (million euros) |  |  |  |  |  |  |  |  |
| Total | 16,349.3 | 11,390.7 | 16,012.7 | 8,333.3 | 3,237.0 | 4,797.6 | 6,336.5 | 55.8 |
| Capital increases | 16,339.7 | 11,388.7 | 15,407.0 | 8,262.0 | 3,237.0 | 4,797.6 | 6,336.5 | 55.8 |
| of which, primary offerings | 292.0 | 17.3 | 958.7 | 14.2 | 0.0 | 3,696.4 | 8.4 | 0.0 |
| Spanish tranche | 292.0 | 14.9 | 61.6 | 13.9 | 0.0 | 3,696.4 | 8.4 | 0.0 |
| International tranche | 0.0 | 2.5 | 897.2 | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 |
| Secondary offerings | 9.5 | 1.9 | 605.7 | 71.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| Spanish tranche | 9.5 | 1.9 | 79.1 | 71.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| International tranche | 0.0 | 0.0 | 526.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NOMINAL AMOUNTS ${ }^{3}$ (million euros) |  |  |  |  |  |  |  |  |
| Total | 1,835.8 | 1,892.1 | 6,313.4 | 1,083.2 | 547.7 | 1,975.9 | 2,749.5 | 184.1 |
| Capital increases | 1,835.7 | 1,892.0 | 6,304.4 | 1,074.3 | 547.7 | 1,975.9 | 2,749.5 | 184.1 |
| of which, primary offerings | 100.0 | 0.1 | 1.9 | 1.0 | 0.0 | 1,871.3 | 0.5 | 0.0 |
| Spanish tranche | 100.0 | 0.1 | 1.8 | 0.9 | 0.0 | 1,871.3 | 0.5 | 0.0 |
| International tranche | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Secondary offerings | 0.1 | 0.0 | 9.0 | 8.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| Spanish tranche | 0.1 | 0.0 | 8.9 | 8.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| International tranche | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NUMBER OF FILES ${ }^{4}$ |  |  |  |  |  |  |  |  |
| Total | 54 | 53 | 69 | 29 | 17 | 23 | 26 | 15 |
| Capital increases | 53 | 53 | 67 | 28 | 17 | 22 | 26 | 15 |
| of which, primary offerings | 2 | 2 | 12 | 4 | 0 | 3 | 3 | 0 |
| of which, bonus issues | 18 | 11 | 15 | 7 | 2 | 5 | 8 | 5 |
| Secondary offerings | 2 | 1 | 3 | 1 | 0 | 1 | 0 | 0 |
| NUMBER OF ISSUERS ${ }^{4}$ |  |  |  |  |  |  |  |  |
| Total | 39 | 34 | 46 | 23 | 13 | 16 | 22 | 10 |
| Capital increases | 38 | 34 | 45 | 22 | 13 | 15 | 22 | 10 |
| of which, primary offerings | 2 | 2 | 12 | 4 | 0 | 3 | 3 | 0 |
| Secondary offerings | 2 | 1 | 2 | 1 | 0 | 1 | 0 | 0 |

1 Includes registered offerings with issuance prospectuses and listings admitted to trading without issuance prospectuses.
2 Available data: November 2011.
3 Does not include registered amounts of operations which were not carried out.
4 Includes all registered operations, including the issues that were not carried out.

## Primary and secondary offerings. By type of subscriber

TABLE 1.2


[^60]
## Companies listed ${ }^{1}$

TABLE 1.3

|  | 2008 | 2009 | 2010 | $\begin{array}{r} 2010 \\ \hline \text { IV } \end{array}$ | 2011 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | I | II | III | IV ${ }^{\mathbf{2}}$ |
| Total electronic market ${ }^{3}$ | 136 | 133 | 129 | 129 | 130 | 130 | 130 | 130 |
| Without Nuevo Mercado | 136 | 133 | 129 | 129 | 130 | 130 | 130 | 130 |
| Nuevo Mercado | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Foreign companies | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 |
| Secondary market | 8 | 7 | 6 | 6 | 6 | 6 | 6 | 6 |
| Madrid | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Barcelona | 6 | 5 | 4 | 4 | 4 | 4 | 4 | 4 |
| Bilbao | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Valencia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Open outcry ex-SICAV | 29 | 29 | 28 | 28 | 28 | 28 | 27 | 27 |
| Madrid | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| Barcelona | 19 | 19 | 18 | 18 | 18 | 18 | 17 | 17 |
| Bilbao | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Valencia | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Open outcry SICAV | 3 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| Alternative stock market (MAB) | 3,347 | 3,251 | 3,144 | 3,144 | 3,121 | 3,091 | 3,088 | 3,080 |
| Latibex | 35 | 32 | 29 | 29 | 29 | 29 | 29 | 29 |

1 Data at end of period.
2 Available data: November 2011.
3 Does not include ETF (Exchange Traded Funds).

Capitalisation ${ }^{1}$ TABLE 1.4

| Million euros | 2008 | 2009 | 2010 | 20102011 |  | II | III | IV ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| Total electronic market ${ }^{3}$ | 531,194.2 | 634,762.8 | 590,182.8 | 565,585.2 | 619,538.0 | 609,135.8 | 568,142.8 | 492,328.4 |
| Without Nuevo Mercado | 531,194.2 | 634,762.8 | 590,182.8 | 565,585.2 | 619,538.0 | 609,135.8 | 568,142.8 | 492,328.4 |
| Nuevo Mercado | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Foreign companies ${ }^{4}$ | 61,317.5 | 94,954.0 | 92,275.8 | 100,249.8 | 104,571.0 | 103,403.8 | 1,357.3 | 80,843.0 |
| Ibex 35 | 322,806.6 | 404,997.3 | 376,747.6 | 348,998.9 | 385,136.5 | 382,731.8 | 364,914.0 | 316,486.67 |
| Secondary market | 109.9 | 80.9 | 69.1 | 74.6 | 59.4 | 57.5 | 74.9 | 60.0 |
| Madrid | 22.8 | 24.9 | 23.4 | 24.7 | 25.5 | 23.6 | 26.4 | 26.0 |
| Barcelona | 87.1 | 56.0 | 45.7 | 49.9 | 33.9 | 33.9 | 48.5 | 33.9 |
| 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-SICAV | 5,340.7 | 4,226.5 | 4,159.1 | 4,128.2 | 3,980.3 | 3,835.4 | 3,859.2 | 3,729.0 |
| Madrid | 1,454.7 | 997.3 | 958.0 | 878.8 | 873.3 | 841.7 | 924.0 | 794.1 |
| Barcelona | 3,580.2 | 3,400.6 | 3,336.4 | 3,432.2 | 3,325.1 | 3,187.2 | 3,139.2 | 3,235.2 |
| Bilbao | 45.9 | 435.4 | 433.4 | 362.1 | 322.4 | 321.2 | 386.9 | 324.7 |
| Valencia | 760.4 | 559.2 | 554.8 | 458.7 | 426.4 | 423.6 | 475.2 | 274.8 |
| Open outcry SICAV ${ }^{5}$ | 126.8 | 28.5 | 28.1 | 32.6 | 33.0 | 36.1 | 30.9 | 0.0 |
| Alternative stock market (MAB) ${ }^{5}$ | 24,718.6 | 26,282.9 | 26,502.4 | 26,340.8 | 26,581.5 | 26,043.0 | 23,271.1 | 23,484.3 |
| Latibex | 210,773.5 | 412,628.9 | 437,016.7 | 435,337.8 | 425,895.7 | 452,926.3 | 408,834.8 | 399,335.2 |

1 Data at end of period.
2 Available data: November 2011.
3 Does not include ETF (Exchange Traded Funds).
4 The capitalisation of foreign companies is calculated using their entire shares, whether they are deposited in Spain or not.
5 The calculation only includes the outstanding shares of the SICAV, and not Treasury shares, as they only report the share capital at the end of the year.

| Million euros | 2008 | 2009 | 2010 | 20102011 |  | II | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| Total electronic market ${ }^{2}$ | 1,228,392.4 | 877,073.5 | 1,026,478.5 | 291,987.6 | 244,908.3 | 236,325.4 | 232,254.4 | 145,451.4 |
| Without Nuevo Mercado | 1,228,380.9 | 877,073.5 | 1,026,478.5 | 291,987.6 | 244,908.3 | 236,325.4 | 232,254.4 | 145,451.4 |
| Nuevo Mercado | 11.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Foreign companies | 1,407.1 | 4,750.4 | 6,415.3 | 1,258.6 | 1,379.9 | 1,056.0 | 1,255.1 | 1,089.7 |
| Secondary market | 31.7 | 3.2 | 3.0 | 1.4 | 0.8 | 0.3 | 0.3 | 0.0 |
| Madrid | 3.4 | 2.0 | 2.8 | 1.3 | 0.5 | 0.1 | 0.3 | 0.0 |
| Barcelona | 28.3 | 1.2 | 0.3 | 0.0 | 0.3 | 0.2 | 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-SICAV | 182.1 | 52.8 | 157.2 | 81.2 | 18.1 | 7.5 | 9.9 | 4.4 |
| Madrid | 73.9 | 16.5 | 15.7 | 1.5 | 4.5 | 1.8 | 7.7 | 0.9 |
| Barcelona | 103.6 | 29.4 | 135.7 | 78.0 | 13.5 | 5.6 | 2.1 | 3.3 |
| Bilbao | 0.1 | 1.1 | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Valencia | 4.5 | 5.9 | 1.9 | 1.7 | 0.1 | 0.1 | 0.0 | 0.1 |
| Open outcry SICAV | 25.3 | 19.7 | 8.1 | 0.5 | 1.7 | 3.0 | 0.8 | 0.0 |
| Alternative stock market (MAB) | 7,060.3 | 5,080.1 | 4,147.9 | 1,146.9 | 879.6 | 1,134.0 | 1,088.2 | 682.3 |
| Latibex | 757.7 | 434.7 | 521.2 | 119.2 | 102.3 | 89.4 | 93.1 | 53.3 |

1 Available data: November 2011.
2 Does not include ETF (Exchange Traded Funds).

Trading on the electronic market by type of transaction ${ }^{1}$
TABLE 1.6

| Million euros | 2008 | 2009 | 2010 | 20102011 |  | II | III | IV ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| Regular trading | 1,180,835.9 | 833,854.9 | 983,584.5 | 280,656.0 | 235,958.6 | 225,422.9 | 216,374.5 | 141,915.2 |
| Order-based | 774,718.1 | 499,182.8 | 541,879.8 | 131,954.9 | 153,546.1 | 119,669.8 | 134,441.1 | 70,945.5 |
| Put-throughs | 105,673.9 | 51,335.8 | 58,678.1 | 15,505.2 | 22,522.2 | 13,555.7 | 17,797.8 | 10,526.4 |
| Block trades | 300,443.9 | 283,336.3 | 383,026.6 | 133,196.0 | 59,890.3 | 92,197.4 | 64,135.6 | 60,443.2 |
| Off-hours | 10,175.2 | 5,996.6 | 17,209.5 | 3,064.3 | 2,096.0 | 2,645.6 | 3,308.7 | 1,183.1 |
| Authorised trades | 3,183.2 | 4,695.6 | 2,660.5 | 1,025.8 | 843.3 | 676.6 | 1,212.2 | 636.3 |
| Trans. under Art. 36.1 of Securities Market Law | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Takeover bids | 17,461.2 | 7,188.9 | 312.0 | 0.0 | 0.0 | 233.8 | 3,983.1 | 0.0 |
| Secondary offerings | 292.0 | 1,325.0 | 1,448.2 | 0.0 | 0.0 | 0.0 | 3,922.1 | 0.0 |
| Declared trades | 1,066.8 | 5,202.6 | 2,273.4 | 0.0 | 0.0 | 2,171.6 | 30.4 | 10.7 |
| Exercise of options | 9,661.9 | 11,443.2 | 11,474.7 | 5,235.2 | 3,501.6 | 2,717.4 | 1,545.9 | 738.2 |
| Hedging | 5,716.3 | 7,366.7 | 7,515.8 | 2,006.3 | 2,508.7 | 2,457.5 | 1,877.5 | 968.0 |

1 Does not include ETF (Exchange Traded Funds).
2 Available data: November 2011.

## Margin trading

TABLE 1.7

| Million euros | 2008 | 2009 | 2010 | 2010 | 2011 | II | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| TRADING |  |  |  |  |  |  |  |  |
| Securities lending (préstamo system) ${ }^{2}$ | 583,950.8 | 471,007.1 | 556,246.7 | 154,640.3 | 108,561.1 | 142,262.8 | 122,207.6 | 92,291.0 |
| Margin trading for sale of securities ${ }^{3}$ | 624.9 | 704.3 | 598.0 | 130.1 | 212.3 | 112.9 | 110.0 | 63.3 |
| Margin trading for purchases of securities ${ }^{3}$ | 154.7 | 106.4 | 65.9 | 16.9 | 19.8 | 11.4 | 17.2 | 20.4 |
| OUTSTANDING BALANCE |  |  |  |  |  |  |  |  |
| Securities lending (préstamo system) ${ }^{2}$ | 43,647.8 | 47,322.2 | 36,195.9 | 36,195.9 | 39,779.8 | 39,553.6 | 33,213.4 | 33,464.0 |
| Margin trading for sale of securities ${ }^{3}$ | 20.7 | 21.1 | 9.9 | 9.9 | 17.6 | 12.7 | 10.8 | 6.0 |
| Margin trading for purchases of securities ${ }^{3}$ | 7.0 | 5.6 | 5.0 | 5.0 | 4.5 | 5.2 | 3.2 | 5.9 |

[^61]Gross issues registered ${ }^{1}$ at the CNMV
TABLE 1.8

|  | 2008 | 2009 | 2010 | 2010 | 2011 | II | III | IV ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| NUMBER OF ISSUERS |  |  |  |  |  |  |  |  |
| Total | 179 | 168 | 115 | 47 | 43 | 42 | 28 | 31 |
| Mortgage bonds | 19 | 27 | 25 | 13 | 14 | 15 | 9 | 13 |
| Territorial bonds | 7 | 1 | 6 | 1 | 2 | 4 | 2 | 5 |
| Non-convertible bonds and debentures | 30 | 50 | 39 | 11 | 10 | 12 | 6 | 6 |
| Convertible/exchangeable bonds and debentures | 1 | 3 | 2 | 2 | 3 | 1 | 0 | 1 |
| Asset-backed securities | 88 | 68 | 36 | 15 | 8 | 9 | 9 | 7 |
| Commercial paper | 77 | 69 | 58 | 19 | 15 | 12 | 7 | 11 |
| Securitised | 2 | 2 | 2 | 1 | 0 | 1 | 0 | 0 |
| Other commercial paper | 75 | 67 | 56 | 18 | 15 | 11 | 7 | 11 |
| Other fixed-income issues | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Preferred shares | 8 | 23 | 0 | 0 | 1 | 0 | 0 | 0 |
| NUMBER OF ISSUES |  |  |  |  |  |  |  |  |
| Total | 337 | 512 | 349 | 98 | 89 | 82 | 58 | 90 |
| Mortgage bonds | 47 | 75 | 88 | 21 | 32 | 29 | 10 | 34 |
| Territorial bonds | 8 | 1 | 9 | 2 | 4 | 4 | 18 | 15 |
| Non-convertible bonds and debentures | 76 | 244 | 154 | 38 | 19 | 27 | 14 | 17 |
| Convertible/exchangeable bonds and debentures | 1 | 6 | 3 | 3 | 6 | 1 | 0 | 1 |
| Asset-backed securities | 108 | 76 | 36 | 15 | 10 | 9 | 9 | 10 |
| Commercial paper | 88 | 73 | 59 | 19 | 16 | 12 | 7 | 13 |
| Securitised | 2 | 2 | 2 | 1 | 0 | 1 | 0 | 0 |
| Other commercial paper | 86 | 71 | 57 | 18 | 16 | 11 | 7 | 13 |
| Other fixed-income issues | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Preferred shares | 9 | 37 | 0 | 0 | 2 | 0 | 0 | 0 |
| NOMINAL AMOUNT (million euros) |  |  |  |  |  |  |  |  |
| Total | 476,275.7 | 387,475.8 | 226,448.9 | 55,736.9 | 77,161.3 | 59,900.0 | 38,693.6 | 95,875.0 |
| Mortgage bonds | 14,300.0 | 35,573.9 | 34,378.5 | 8,519.1 | 19,254.0 | 18,980.0 | 5,250.0 | 15,592.5 |
| Territorial bonds | 1,820.0 | 500.0 | 5,900.0 | 500.0 | 2,935.0 | 1,800.0 | 7,437.2 | 8,162.0 |
| Non-convertible bonds and debentures | 10,489.6 | 62,249.0 | 24,356.0 | 7,524.7 | 2,578.1 | 3,320.2 | 981.0 | 6,816.9 |
| Convertible/exchangeable bonds and debentures | 1,429.1 | 3,200.0 | 968.0 | 968.0 | 681.6 | 1,500.0 | 0.0 | 3,475.0 |
| Asset-backed securities | 135,252.5 | 81,651.2 | 63,260.5 | 16,497.3 | 26,585.0 | 11,168.4 | 10,449.3 | 35,944.0 |
| Spanish tranche | 132,730.1 | 77,289.4 | 62,743.0 | 16,473.3 | 23,706.2 | 10,130.0 | 10,115.6 | 35,944.0 |
| International tranche | 2,522.4 | 4,361.9 | 517.5 | 24.0 | 2,878.8 | 1,038.4 | 333.7 | 0.0 |
| Commercial paper ${ }^{3}$ | 311,738.5 | 191,341.7 | 97,586.0 | 21,727.9 | 24,927.6 | 23,131.3 | 14,576.1 | 25,884.6 |
| Securitised | 2,843.1 | 4,758.4 | 5,057.0 | 1,409.0 | 546.0 | 913.0 | 259.0 | 586.0 |
| Other commercial paper | 308,895.4 | 186,583.3 | 92,529.0 | 20,318.9 | 24,381.6 | 22,218.3 | 14,317.1 | 25,298.6 |
| Other fixed-income issues | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Preferred shares | 1,246.0 | 12,960.0 | 0.0 | 0.0 | 200.0 | 0.0 | 0.0 | 0.0 |
| Pro memoria: |  |  |  |  |  |  |  |  |
| Subordinated issues | 12,949.5 | 20,988.5 | 9,154.2 | 2,048.2 | 5,407.9 | 2,997.5 | 4,664.3 | 9,524.0 |
| Underwritten issues | 9,169.5 | 4,793.8 | 299.0 | 0.0 | 10.0 | 0.0 | 0.0 | 0.0 |

1 Includes issuance and admission to trading files.
2 Available data: November 2011.
3 The figures for commercial paper issues refer to the amounts placed.

## Admission to trading on the AIAF market

TABLE 1.9

|  |  |  |  | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Nominal amount in million euros | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{I V}$ | $\mathbf{I}$ | II | III | IV ${ }^{\mathbf{1}}$ |
| Total | $476,710.4$ | $388,455.0$ | $223,404.5$ | $48,230.5$ | $70,790.8$ | $68,289.8$ | $36,499.9$ | $59,257.7$ |
| Commercial paper | $314,417.4$ | $191,427.7$ | $99,784.4$ | $21,521.8$ | $25,096.2$ | $23,094.5$ | $13,827.9$ | $25,803.6$ |
| Bonds and debentures | $10,040.3$ | $61,862.5$ | $24,728.6$ | $7,512.4$ | $2,080.6$ | $3,616.9$ | 682.0 | $1,361.7$ |
| Mortgage bonds | $14,150.0$ | $35,568.9$ | $32,861.0$ | $8,499.1$ | $17,244.0$ | $21,435.0$ | $6,425.0$ | $12,437.5$ |
| Territorial bonds | $1,930.0$ | 500.0 | $5,900.0$ | 500.0 | $2,935.0$ | 300.0 | $5,543.2$ | $11,556.0$ |
| Asset-backed securities | $135,926.6$ | $85,542.9$ | $60,030.5$ | $10,197.3$ | $23,235.0$ | $19,843.4$ | $10,021.9$ | $8,099.0$ |
| Preferred shares | 246.0 | $13,552.9$ | 100.0 | 0.0 | 200.0 | 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: November 2011.

|  | 2008 | 2009 | 2010 | 2010 | 2011 | II | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| NUMBER OF ISSUERS |  |  |  |  |  |  |  |  |
| Total | 556 | 614 | 634 | 634 | 631 | 613 | 608 | 608 |
| Commercial paper | 72 | 67 | 60 | 60 | 56 | 46 | 50 | 47 |
| Bonds and debentures | 93 | 91 | 93 | 93 | 91 | 93 | 93 | 91 |
| Mortgage bonds | 22 | 29 | 33 | 33 | 35 | 36 | 39 | 41 |
| Territorial bonds | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 13 |
| Asset-backed securities | 383 | 442 | 459 | 459 | 458 | 441 | 433 | 433 |
| Preferred shares | 52 | 60 | 59 | 59 | 60 | 60 | 60 | 60 |
| Matador bonds | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| NUMBER OF ISSUES |  |  |  |  |  |  |  |  |
| Total | 4,639 | 4,084 | 3,630 | 3,630 | 3,570 | 3,454 | 3,536 | 4,229 |
| Commercial paper | 2,489 | 1,507 | 958 | 958 | 911 | 851 | 944 | 1,623 |
| Bonds and debentures | 450 | 611 | 645 | 645 | 631 | 627 | 630 | 626 |
| Mortgage bonds | 146 | 202 | 253 | 253 | 267 | 277 | 283 | 302 |
| Territorial bonds | 26 | 25 | 26 | 26 | 28 | 29 | 40 | 49 |
| Asset-backed securities | 1,436 | 1,629 | 1,641 | 1,641 | 1,625 | 1,562 | 1,531 | 1,521 |
| Preferred shares | 78 | 96 | 93 | 93 | 94 | 94 | 94 | 94 |
| Matador bonds | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| OUTSTANDING BALANCE ${ }^{2}$ (million euros) |  |  |  |  |  |  |  |  |
| Total | 819,637.7 | 870,981.1 | 850,181.7 | 850,181.7 | 854,735.5 | 849,569.3 | 844,342.4 | 867,615.7 |
| Commercial paper | 71,762.2 | 41,647.0 | 23,233.6 | 23,233.6 | 24,274.6 | 22,123.1 | 18,813.5 | 31,970.1 |
| Bonds and debentures | 122,001.9 | 150,886.3 | 146,077.7 | 146,077.7 | 139,744.8 | 136,241.1 | 131,918.0 | 128,714.2 |
| Mortgage bonds | 162,465.5 | 185,343.8 | 195,734.8 | 195,734.8 | 202,528.8 | 219,313.8 | 223,913.8 | 236,231.3 |
| Territorial bonds | 17,030.0 | 16,030.0 | 18,350.0 | 18,350.0 | 20,485.0 | 20,285.0 | 24,028.2 | 31,884.2 |
| Asset-backed securities | 422,010.7 | 442,831.5 | 434,835.1 | 434,835.1 | 435,551.9 | 419,458.0 | 413,520.5 | 406,667.6 |
| Preferred shares | 23,308.6 | 33,183.8 | 30,891.8 | 30,891.8 | 31,091.8 | 31,089.6 | 31,089.6 | 31,089.6 |
| 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: November 2011.
2 Nominal amounts.

## AIAF. Trading

TABLE 1.11

| Nominal amount in million euros | 2008 | 2009 | 2010 | $\begin{array}{r} 2010 \\ \hline \mathrm{IV} \end{array}$ | 2011 | II | II | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | I |  |  |  |
| BY ASSET TYPE |  |  |  |  |  |  |  |  |
| Total | 2,521,040.1 | 4,658,633.2 | 4,383,118.7 | 1,811,416.3 | 2,540,940.4 | 1,618,996.9 | 1,662,056.5 | 1,061,502.1 |
| Commercial paper | 591,943.8 | 533,331.0 | 385,238.9 | 72,604.4 | 67,260.3 | 57,492.7 | 49,896.0 | 31,295.7 |
| Bonds and debentures | 80,573.8 | 321,743.0 | 922,393.1 | 349,527.2 | 241,674.3 | 96,130.6 | 89,289.3 | 31,237.2 |
| Mortgage bonds | 129,995.3 | 263,150.0 | 271,441.8 | 96,608.6 | 169,889.3 | 115,484.5 | 105,436.4 | 171,845.7 |
| Territorial bonds | 10,142.3 | 7,209.0 | 14,458.2 | 1,924.7 | 32,764.3 | 43,117.1 | 68,254.4 | 313,800.1 |
| Asset-backed securities | 1,704,341.8 | 3,527,486.4 | 2,784,775.4 | 1,289,446.1 | 2,028,138.1 | 1,303,425.0 | 1,348,043.0 | 512,871.2 |
| Preferred shares | 4,030.0 | 5,668.5 | 4,635.7 | 1,273.8 | 1,178.3 | 3,337.6 | 1,085.5 | 433.6 |
| Matador bonds | 13.2 | 45.2 | 175.7 | 31.6 | 35.9 | 9.5 | 51.9 | 18.4 |
| BY TRANSACTION TYPE |  |  |  |  |  |  |  |  |
| Total | 2,521,040.1 | 4,658,633.2 | 4,383,118.7 | 1,811,416.3 | 2,540,940.4 | 1,618,996.9 | 1,662,056.5 | 1,061,502.1 |
| Outright | 387,897.1 | 378,348.4 | 288,927.3 | 69,161.4 | 100,126.8 | 78,598.4 | 60,680.5 | 55,413.2 |
| Repos | 381,505.0 | 362,068.7 | 304,493.2 | 61,165.8 | 55,980.9 | 51,485.2 | 47,765.9 | 26,750.8 |
| Sell-buybacks/Buy-sellbacks | 1,751,638.0 | 3,918,216.1 | 3,789,698.3 | 1,681,089.0 | 2,384,832.7 | 1,488,913.3 | 1,553,610.1 | 979,338.1 |

1 Available data: November 2011.

AIAF. Third-party trading by purchaser sector
TABLE 1.12

| Nominal amount in million euros | 2008 | 2009 | 2010 | 20102011 |  | II | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| Total | 744,652.5 | 681,946.6 | 553,896.6 | 120,800.2 | 136,405.9 | 120,560.2 | 99,716.4 | 78,297.9 |
| Non-financial companies | 285,044.4 | 256,224.6 | 162,949.5 | 33,281.8 | 36,362.7 | 37,287.8 | 30,082.8 | 15,671.3 |
| Financial institutions | 334,851.6 | 298,909.1 | 289,950.4 | 67,718.0 | 67,797.2 | 55,419.8 | 52,743.5 | 49,512.4 |
| Credit institutions | 130,056.0 | 125,547.5 | 102,372.1 | 29,970.9 | 34,359.6 | 27,624.9 | 25,982.2 | 28,507.9 |
| CIS , insurance and pension funds | 154,709.8 | 115,865.3 | 125,899.4 | 22,618.2 | 24,511.6 | 25,796.8 | 25,835.3 | 20,349.5 |
| Other financial institutions | 50,085.8 | 57,496.3 | 61,678.9 | 15,128.9 | 8,926.0 | 1,998.1 | 926.0 | 655.0 |
| Public administrations | 6,331.2 | 5,808.5 | 3,117.7 | 309.8 | 295.8 | 392.8 | 1,336.2 | 100.0 |
| Households and NPISH ${ }^{2}$ | 13,344.0 | 14,647.8 | 14,244.4 | 2,541.9 | 1,866.8 | 2,817.3 | 1,846.8 | 2,628.9 |
| Rest of the world | 105,081.2 | 106,356.6 | 83,634.6 | 16,948.7 | 30,083.5 | 24,642.5 | 13,707.1 | 10,385.2 |

[^62]|  | 2008 | 2009 | 2010 | 2010 | 2011 | II | III | IV ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| NOMINAL AMOUNTS (million euros) |  |  |  |  |  |  |  |  |
| Total | 3,390.6 | 5,866.8 | 868.0 | 468.0 | 500.0 | 681.6 | 1,500.0 | 0.0 |
| Non-convertible bonds and debentures | 0.0 | 0.0 | 400.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Convertible/exchangeable bonds and debentures | 0.0 | 4,510.8 | 468.0 | 468.0 | 500.0 | 681.6 | 1,500.0 | 0.0 |
| Asset-backed securities | 3,390.6 | 1,356.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NUMBER OF ISSUES |  |  |  |  |  |  |  |  |
| Total | 33 | 10 | 8 | 1 | 1 | 4 | 1 | 0 |
| Non-convertible bonds and debentures | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 |
| Convertible/exchangeable bonds and debentures | 0 | 4 | 1 | 1 | 1 | 4 | 1 | 0 |
| Asset-backed securities | 33 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1 Private issuers. Includes issuance and admission to trading files.
2 Available data: November 2011.

Equity markets. Issuers, issues and outstanding balances
TABLE 1.14

|  | 2008 | 2009 | 2010 | 2010 | 2011 | II | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| NUMBER OF ISSUERS |  |  |  |  |  |  |  |  |
| Total | 58 | 62 | 60 | 60 | 57 | 59 | 59 | 59 |
| Private issuers | 45 | 48 | 46 | 46 | 44 | 46 | 46 | 46 |
| Non-financial companies | 5 | 6 | 5 | 5 | 4 | 4 | 4 | 4 |
| Private financial institutions | 40 | 42 | 41 | 41 | 40 | 42 | 42 | 42 |
| Public administrations ${ }^{2}$ | 13 | 14 | 14 | 14 | 13 | 13 | 13 | 13 |
| Autonomous regions | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| NUMBER OF ISSUES |  |  |  |  |  |  |  |  |
| Total | 271 | 269 | 247 | 247 | 237 | 245 | 243 | 243 |
| Private issuers | 157 | 155 | 145 | 145 | 137 | 137 | 134 | 133 |
| Non-financial companies | 9 | 10 | 7 | 7 | 7 | 7 | 7 | 6 |
| Private financial institutions | 148 | 145 | 138 | 138 | 130 | 130 | 127 | 127 |
| Public administrations ${ }^{2}$ | 114 | 114 | 102 | 102 | 100 | 108 | 109 | 110 |
| Autonomous regions | 82 | 76 | 64 | 64 | 63 | 72 | 74 | 75 |
| OUTSTANDING BALANCE ${ }^{3}$ (million euros) |  |  |  |  |  |  |  |  |
| Total | 29,142.6 | 36,299.5 | 41,091.3 | 41,091.3 | 41,497.4 | 45,280.8 | 43,183.1 | 44,481.0 |
| Private issuers | 17,237.9 | 21,600.9 | 19,261.5 | 19,261.5 | 19,301.5 | 19,017.9 | 17,524.3 | 17,839.8 |
| Non-financial companies | 381.0 | 1,783.7 | 376.6 | 376.6 | 375.8 | 375.8 | 375.8 | 375.5 |
| Private financial institutions | 16,856.9 | 19,817.2 | 18,884.8 | 18,884.8 | 18,925.7 | 18,642.1 | 17,148.5 | 17,464.2 |
| Public administrations ${ }^{3}$ | 11,904.7 | 14,698.6 | 21,829.9 | 21,829.9 | 22,195.9 | 26,262.9 | 25,658.8 | 26,641.3 |
| Autonomous regions | 9,972.5 | 12,338.3 | 19,442.4 | 19,442.4 | 19,812.5 | 23,992.9 | 23,489.5 | 24,472.0 |

1 Available data: November 2011.
2 Does not include book-entry debt.
3 Nominal amounts.

Equity markets. Trading by market
TABLE 1.15

| Nominal amount in million euros | 2008 | 2009 | 2010 | 20102011 |  | II | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | 1 |  |  |  |
| Electronic market | 1,580.1 | 633.0 | 510.5 | 122.5 | 91.9 | 85.9 | 98.8 | 45.2 |
| Open outcry | 7,842.1 | 4,008.4 | 7,525.6 | 4,674.4 | 2,398.6 | 597.7 | 409.0 | 1,333.6 |
| Madrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Barcelona | 7,674.9 | 3,821.1 | 7,146.7 | 4,620.6 | 2,379.4 | 578.6 | 398.3 | 1,326.1 |
| Bilbao | 6.1 | 4.6 | 2.3 | 0.5 | 0.2 | 0.1 | 0.1 | 0.0 |
| Valencia | 161.1 | 182.7 | 376.6 | 53.4 | 19.0 | 18.9 | 10.7 | 7.5 |
| Public book-entry debt | 46.2 | 49.1 | 331.1 | 9.1 | 4.4 | 187.8 | 471.8 | 124.0 |
| Autonomous region debt | 71,054.9 | 70,065.8 | 59,017.0 | 13,336.2 | 11,811.4 | 16,831.6 | 14,615.2 | 15,800.6 |

1 Available data: November 2011.

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

| Nominal amount in million euros | 2008 | 2009 | 2010 | 20102011 |  | II | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| Total | 132,327.4 | 202,120.5 | 265,966.0 | 41,660.2 | 27,593.2 | 28,318.9 | 17,039.0 | 8,315.9 |
| Outright | 89,010.5 | 114,314.0 | 110,011.0 | 21,116.0 | 27,293.0 | 26,482.0 | 17,039.0 | 8,267.0 |
| Sell-buybacks/Buy-sellbacks | 43,316.9 | 86,806.5 | 155,433.0 | 20,394.2 | 300.2 | 1,836.9 | 0.0 | 48.9 |
| Other transactions | 0.0 | 1,000.0 | 522.0 | 150.0 | 0.0 | 0.0 | 0.0 | 0.0 |

1 Available data: November 2011.

### 1.3 Derivatives and other products

### 1.3.1 Financial derivatives markets: MEFF

Negociación en MEFF
TABLE 1.17

| Number of contracts | 2008 | 2009 | 2010 | 20102011 |  | II | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| Debt products | 12 | 18 | 14 | 2 | 6 | 4 | 4 | 0 |
| Debt futures ${ }^{2}$ | 12 | 18 | 14 | 2 | 6 | 4 | 4 | 0 |
| Ibex 35 products ${ }^{3,4}$ | 8,433,963 | 6,187,544 | 6,946,167 | 1,585,302 | 1,714,038 | 1,403,188 | 1,635,072 | 756,455 |
| Ibex 35 plus futures | 7,275,299 | 5,436,989 | 6,280,999 | 1,432,956 | 1,575,272 | 1,280,699 | 1,484,184 | 686,412 |
| Ibex 35 mini futures | 330,042 | 314,829 | 357,926 | 72,265 | 90,048 | 72,265 | 91,073 | 36,834 |
| Call options mini | 323,874 | 230,349 | 122,158 | 30,717 | 17,606 | 19,733 | 25,590 | 15,849 |
| Put options mini | 504,749 | 205,377 | 185,083 | 49,364 | 31,111 | 30,491 | 34,225 | 17,361 |
| Share products ${ }^{5}$ | 64,554,817 | 80,114,693 | 57,291,482 | 17,395,281 | 16,374,082 | 10,805,253 | 9,687,083 | 6,812,506 |
| Futures | 46,237,568 | 44,586,779 | 19,684,108 | 6,650,855 | 8,006,039 | 5,337,121 | 5,510,377 | 2,518,447 |
| Call options | 7,809,423 | 18,864,840 | 17,186,515 | 4,250,315 | 3,761,646 | 2,026,429 | 1,665,296 | 1,968,030 |
| Put options | 10,507,826 | 16,663,074 | 20,420,859 | 6,494,111 | 4,606,397 | 3,441,703 | 2,511,410 | 2,326,029 |
| Pro memoria: MEFF trading on Eurex |  |  |  |  |  |  |  |  |
| Debt products ${ }^{6}$ | 869,105 | 558,848 | 373,113 | 71,884 | 90,405 | 75,174 | 56,239 | 35,197 |
| Index products ${ }^{7}$ | 1,169,059 | 835,159 | 604,029 | 124,415 | 106,551 | 96,795 | 137,083 | 76,439 |

1 Available data: November 2011.
2 Nominal contract size: 100 thousand euros.
3 The number of mini products (multiples of 1 euro) was standardised to the size of the lbex 35 plus futures (multiples of 10 euros).
4 Nominal contract size: Ibex 35 * 10 euros.
5 Nominal 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

## Issues registered at the CNMV

|  | 2008 | 2009 | 2010 | 2010 | 2011 | II | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| WARRANTS ${ }^{2}$ |  |  |  |  |  |  |  |  |
| Premium amount (million euros) | 12,234.4 | 5,165.1 | 4,915.3 | 1,227.4 | 1,174.6 | 891.4 | 1,491.8 | 1,410.6 |
| On shares | 6,914.1 | 2,607.1 | 2,537.4 | 705.7 | 666.8 | 462.2 | 804.6 | 915.9 |
| On indexes | 4,542.8 | 2,000.1 | 1,852.6 | 380.8 | 387.8 | 293.9 | 504.9 | 412.9 |
| Other ${ }^{3}$ | 777.5 | 558.0 | 525.4 | 140.9 | 120.0 | 135.2 | 182.2 | 81.9 |
| Number of issues | 9,790 | 7,342 | 8,375 | 2,534 | 1,946 | 1,842 | 2,305 | 1,926 |
| Number of issuers | 8 | 9 | 9 | 7 | 7 | 6 | 6 | 6 |
| OPTION BUYING AND SELLING CONTRACTS |  |  |  |  |  |  |  |  |
| Nominal amounts (million euros) | 77.0 | 35.0 | 64.0 | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| On shares | 77.0 | 25.0 | 47.0 | 7.0 | 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 ${ }^{3}$ | 0.0 | 10.0 | 17.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Number of issues | 4 | 3 | 7 | 1 | 0 | 0 | 0 | 0 |
| Number of issuers | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |

[^63]|  | 2008 | 2009 | 2010 | 2010 | 2011 | II | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| WARRANTS |  |  |  |  |  |  |  |  |
| Trading (million euros) | 2,943.7 | 1,768.4 | 1,603.2 | 366.2 | 466.4 | 286.0 | 452.9 | 254.6 |
| On Spanish shares | 1,581.9 | 809.9 | 759.8 | 181.1 | 212.5 | 129.8 | 175.1 | 102.7 |
| On foreign shares | 145.7 | 97.6 | 60.7 | 17.2 | 23.7 | 15.3 | 23.0 | 26.3 |
| On indexes | 1,063.3 | 761.2 | 689.5 | 130.8 | 157.1 | 75.3 | 149.9 | 102.3 |
| Other ${ }^{2}$ | 152.8 | 99.7 | 93.2 | 37.1 | 73.1 | 65.6 | 104.9 | 23.3 |
| Number of issues ${ }^{3}$ | 9,770 | 8,038 | 7,750 | 3,060 | 2,746 | 3,038 | 3,940 | 2,938 |
| Number of issuers ${ }^{3}$ | 10 | 10 | 10 | 10 | 9 | 9 | 9 | 9 |
| CERTIFICATES |  |  |  |  |  |  |  |  |
| Trading (million euros) | 16.8 | 39.2 | 22.0 | 3.7 | 4.1 | 9.3 | 56.2 | 20.4 |
| Number of issues ${ }^{3}$ | 26 | 22 | 16 | 13 | 11 | 10 | 7 | 4 |
| Number of issuers ${ }^{3}$ | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 |
| ETF |  |  |  |  |  |  |  |  |
| Trading (million euros) | 6,938.1 | 3,470.6 | 6,229.7 | 831.3 | 1,081.7 | 571.1 | 815.5 | 929.8 |
| Number of funds | 30 | 32 | 65 | 65 | 67 | 67 | 67 | 68 |
| Assets ${ }^{4}$ (million euros) | 1,630.3 | 1,648.4 | 827.8 | 827.8 | 859.4 | 867.3 | 710.2 | n.a. |

1 Available data: November 2011.
2 Includes the following underlyings: baskets of securities, exchange rates, interest rates and commodities.
3 Issues or issuers which registered trading in each period.
4 Only includes the assets of Spanish ETF because assets of foreign ETF are not available.
n.a.: Not available.

### 1.3.3 Non-financial derivatives

Trading on MFAO ${ }^{1}$
TABLE 1.20

|  | 2008 | 2009 |  | 2010 | 2011 |  | III | IV ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of contracts |  |  | 2010 | IV | I | II |  |  |
| On olive oil |  |  |  |  |  |  |  |  |
| Extra-virgin olive oil futures ${ }^{3}$ | 48,091 | 135,705 | 165,840 | 25,050 | 23,120 | 16,401 | 13,951 | 5,326 |

[^64]3 Nominal contract size: 1,000 kg.

## 2 Investment services

|  | 2008 | 2009 | 2010 | 2010 | 2011 | II | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| BROKER-DEALERS |  |  |  |  |  |  |  |  |
| Spanish firms | 51 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Branches | 79 | 78 | 80 | 80 | 80 | 79 | 79 | 76 |
| Agents | 6,041 | 6,102 | 6,455 | 6,455 | 6,560 | 6,518 | 6,520 | 6,581 |
| BROKERS |  |  |  |  |  |  |  |  |
| Spanish firms | 50 | 50 | 47 | 47 | 45 | 45 | 45 | 45 |
| Branches | 9 | 9 | 10 | 10 | 13 | 13 | 13 | 12 |
| Agents | 639 | 638 | 665 | 665 | 689 | 652 | 655 | 651 |
| PORTFOLIO MANAGEMENT COMPANIES |  |  |  |  |  |  |  |  |
| Spanish firms | 10 | 9 | 7 | 7 | 6 | 6 | 6 | 6 |
| Branches | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Agents | 6 | 5 | 3 | 3 | 2 | 2 | 2 | 3 |
| FINANCIAL ADVISORY FIRMS ${ }^{2}$ |  |  |  |  |  |  |  |  |
| Spanish firms | - | 16 | 48 | 48 | 58 | 64 | 78 | 81 |
| CREDIT INSTITUTIONS ${ }^{3}$ |  |  |  |  |  |  |  |  |
| Spanish firms | 195 | 193 | 186 | 186 | 186 | 189 | 188 | 190 |

1 Available data: November 2011.
2 Investment services firms created by Law 47/2007, of 19 December, modifying Law 24/1988, of 28 July, on the Securities Market, and regulated by CNMV Circular 10/2008, of 30 December.
3 Source: Bank of Spain.

Investment services. Foreign firms
TABLE 2.2

|  | 2008 | 2009 | 2010 | $\begin{array}{r} 2010 \\ \hline \text { IV } \end{array}$ | 2011 |  | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | I | II |  |  |
| Total | 2,232 | 2,364 | 2,604 | 2,604 | 2,671 | 2,743 | 2,786 | 2,809 |
| European Economic Area investment services firms | 1,818 | 1,940 | 2,176 | 2,176 | 2,238 | 2,303 | 2,346 | 2,370 |
| With a branch | 37 | 36 | 41 | 41 | 40 | 40 | 39 | 37 |
| Free provision of services | 1,781 | 1,904 | 2,135 | 2,135 | 2,198 | 2,263 | 2,307 | 2,333 |
| Credit institutions ${ }^{2}$ | 414 | 424 | 428 | 428 | 433 | 440 | 440 | 439 |
| From EU Member States | 405 | 414 | 418 | 418 | 423 | 430 | 430 | 429 |
| With a branch | 56 | 53 | 53 | 53 | 55 | 56 | 55 | 54 |
| Free provision of services | 348 | 360 | 364 | 364 | 368 | 374 | 375 | 375 |
| Subsidiaries under free provision of services | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| From non-EU states | 9 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| With a branch | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Free provision of services | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

1 Available data: November 2011.
2 Source: Bank of Spain and CNMV.

Intermediation of spot transactions ${ }^{1}$

| Million euros | III 2010 |  |  |  | III 2011 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Spanish organised markets |  | Foreign markets | Total | Spanish organised markets |  | Foreign markets | Total |
| FIXED INCOME |  |  |  |  |  |  |  |  |
| Total | 876,901 | 2,768,220 | 195,804 | 3,840,925 | 906,022 | 2,621,084 | 166,579 | 3,693,685 |
| Broker-dealers | 124,065 | 799,040 | 127,136 | 1,050,241 | 117,531 | 802,068 | 133,053 | 1,052,652 |
| Brokers | 752,836 | 1,969,180 | 68,668 | 2,790,684 | 788,491 | 1,819,016 | 33,526 | 2,641,033 |
| EQUITY |  |  |  |  |  |  |  |  |
| Total | 206,292 | 933 | 16,668 | 223,893 | 219,129 | 789 | 15,115 | 235,033 |
| Broker-dealers | 201,963 | 846 | 15,507 | 218,316 | 214,663 | 673 | 13,892 | 229,228 |
| Brokers | 4,329 | 87 | 1,161 | 5,577 | 4,466 | 116 | 1,223 | 5,805 |

[^65]| Million euros | III 2010 |  |  |  | III 2011 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Spanish organised markets | Foreign organised markets | Nonorganised markets | Total | Spanish organised markets | Foreign organised markets | Nonorganised markets | Total |
| Total | 671,498 | 1,707,379 | 533,839 | 2,912,716 | 750,602 | 1,751,107 | 124,591 | 2,626,300 |
| Broker-dealers | 667,283 | 1,425,146 | 460,169 | 2,552,598 | 748,952 | 1,457,511 | 84,540 | 2,291,003 |
| Brokers | 4,215 | 282,233 | 73,670 | 360,118 | 1,650 | 293,596 | 40,051 | 335,297 |

1 The amount of the buy and sell transactions of financial assets, financial futures securities and interest rates and other transactions on interest rates will be the nominal or notional value of the securities or principal which the contract covers. The amount of options transactions will be the strike price of the underlying instrument multiplied by the number of instruments committed.
2 Accumulated data for the period. Quarterly.

## Portfolio management. Number of portfolios and assets under management ${ }^{1}$

TABLE 2.5

|  | III 2010 |  |  | III 2011 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CIS ${ }^{2}$ | Other ${ }^{3}$ | Total | CIS ${ }^{2}$ | Other ${ }^{3}$ | Total |
| NUMBER OF PORTFOLIOS |  |  |  |  |  |  |
| Total | 147 | 13,081 | 13,228 | 147 | 13,713 | 13,860 |
| Broker-dealers | 77 | 7,608 | 7,685 | 87 | 6,721 | 6,808 |
| Brokers | 53 | 3,178 | 3,231 | 55 | 3,608 | 3,663 |
| Portfolio management companies | 17 | 2,295 | 2,312 | 5 | 3,384 | 3,389 |
| ASSETS UNDER MANAGEMENT (thousand euros) |  |  |  |  |  |  |
| Total | 2,049,617 | 7,468,513 | 9,518,130 | 1,849,393 | 7,583,834 | 9,433,227 |
| Broker-dealers | 905,029 | 3,256,821 | 4,161,850 | 889,535 | 3,138,587 | 4,028,122 |
| Brokers | 972,907 | 1,373,954 | 2,346,861 | 862,570 | 1,471,799 | 2,334,369 |
| Portfolio management companies | 171,681 | 2,837,738 | 3,009,419 | 97,288 | 2,973,448 | 3,070,736 |

1 Data at 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 under advisory services ${ }^{1}$
TABLE 2.6

|  | III 2010 |  |  | III 2011 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Professional |  |  | Professional |  |  |
|  | Retail clients | clients | Total ${ }^{2}$ | Retail clients | clients | Total ${ }^{2}$ |
| NUMBER OF CONTRACTS |  |  |  |  |  |  |
| Total | 5,186 | 72 | 5,261 | 7,482 | 106 | 7,618 |
| Broker-dealers | 1,192 | 5 | 1,200 | 1,561 | 2 | 1,568 |
| Brokers | 3,201 | 56 | 3,257 | 4,680 | 94 | 4,799 |
| Portfolio management companies | 793 | 11 | 804 | 1,241 | 10 | 1,251 |
| ASSETS UNDER ADVISORY SERVICES (thousand euros) |  |  |  |  |  |  |
| Total | 2,266,041 | 4,395,489 | 7,023,532 | 3,232,667 | 4,391,507 | 8,097,359 |
| Broker-dealers | 548,967 | 220,851 | 1,131,820 | 798,760 | 31,847 | 1,218,840 |
| Brokers | 1,323,085 | 927,987 | 2,251,072 | 1,871,345 | 1,022,331 | 2,978,629 |
| Portfolio management companies | 393,989 | 3,246,651 | 3,640,640 | 562,562 | 3,337,329 | 3,899,890 |

[^66]| Thousand euros ${ }^{1}$ | 2008 | 2009 | 2010 | 20102011 |  | II | III | IV ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| I. Interest margin | 109,682 | 163,272 | 102,054 | 102,054 | 15,186 | 52,973 | 77,901 | 81,348 |
| II. Net commissions | 674,204 | 562,082 | 533,858 | 533,858 | 157,082 | 275,520 | 382,225 | 414,546 |
| Commission revenues | 943,619 | 782,214 | 798,152 | 798,152 | 231,177 | 419,375 | 606,095 | 659,896 |
| Order processing and execution | 648,036 | 548,362 | 555,207 | 555,207 | 166,934 | 285,047 | 417,529 | 454,386 |
| Placement and underwriting | 42,502 | 26,326 | 8,499 | 8,499 | 1,057 | 2,830 | 5,113 | 5,736 |
| Deposit and entry of securities | 21,198 | 16,183 | 22,367 | 22,367 | 5,465 | 10,887 | 15,821 | 17,459 |
| Portfolio management | 17,306 | 11,768 | 13,880 | 13,880 | 4,180 | 7,911 | 11,867 | 13,422 |
| Design and advisory services | 56,671 | 60,477 | 53,722 | 53,722 | 16,802 | 39,550 | 49,366 | 53,637 |
| Stock search and placement | 12 | 10 | 36 | 36 | 179 | 184 | 484 | 485 |
| Market credit transactions | 19 | 14 | 9 | 9 | 2 | 4 | 6 | 7 |
| Marketing CIS | 91,167 | 63,341 | 65,487 | 65,487 | 16,053 | 31,359 | 45,594 | 50,519 |
| Other | 66,708 | 55,733 | 78,944 | 78,944 | 20,503 | 41,601 | 60,315 | 64,245 |
| Commission expenses | 269,415 | 220,133 | 264,294 | 264,294 | 74,095 | 143,855 | 223,870 | 245,350 |
| III. Profit from financial investments | 800,194 | 45,266 | 48,588 | 48,588 | 28,085 | 38,782 | 150,060 | 158,833 |
| IV. Exchange differences and other operating products and expenses | -626,527 | 21,820 | 26,081 | 26,081 | 2,089 | -5,173 | -115,556 | -110,342 |
| V. Gross margin | 957,553 | 792,440 | 710,580 | 710,580 | 202,442 | 362,102 | 494,630 | 544,385 |
| VI. Operating profit | 434,209 | 339,706 | 276,253 | 276,253 | 88,668 | 142,774 | 174,724 | 187,789 |
| VII. Profit from continuing operations | 365,374 | 250,984 | 196,834 | 196,834 | 73,044 | 121,402 | 149,362 | 160,815 |
| VIII. Net profit for the year | 367,665 | 250,984 | 196,834 | 196,834 | 73,044 | 121,402 | 149,362 | 160,815 |

1 Accumulated amounts from the start of the year up to the last day of each quarter. Includes companies removed over the year
2 Available data: October 2011.

Results of proprietary trading. Broker-dealers
TABLE 2.8

|  | Interest margin |  | Financial investments |  | Exchange differences and other items |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Thousand euros ${ }^{1}$ | III 2010 | III 2011 | III 2010 | III 2011 | III 2010 | III 2011 | III 2010 | III 2011 |
| Total | 79,232 | 77,901 | 9,842 | 150,060 | 44,585 | -117,681 | 133,659 | 110,280 |
| Money market assets and public debt | 3,665 | 1,562 | 8,459 | 9,527 | - | - | 12,124 | 11,089 |
| Other fixed-income securities | 14,079 | 15,122 | 50,637 | 40,733 | - | - | 64,716 | 55,855 |
| Domestic portfolio | 13,090 | 13,343 | 41,793 | 34,411 | - | - | 54,883 | 47,754 |
| Foreign portfolio | 989 | 1,779 | 8,844 | 6,322 | - | - | 9,833 | 8,101 |
| Equity | 61,507 | 50,077 | 229,404 | -371,509 | - | - | 290,911 | -321,432 |
| Domestic portfolio | 44,332 | 33,866 | -56,925 | -21,536 | - | - | -12,593 | 12,330 |
| Foreign portfolio | 17,175 | 16,211 | 286,329 | -349,973 | - | - | 303,504 | -333,762 |
| Derivatives | - | - | -278,971 | 476,224 | - | - | -278,971 | 476,224 |
| Assignments and temporary acquisitions of assets | -1,331 | 644 | - | - | - | - | -1,331 | 644 |
| Market credit transactions | 0 | 0 | - | - | - | - | 0 | 0 |
| Deposits and other transactions with financial intermediaries | 227 | 12,275 | - | - | - | - | 227 | 12,275 |
| Net exchange differences | - | - | - | - | 38,118 | -117,603 | 38,118 | -117,603 |
| Other products and operating charges | - | - | - | - | 1,748 | 2,047 | 1,748 | 2,047 |
| Other transactions | 1,085 | -1,779 | 313 | -4,915 | 4,719 | -2,125 | 6,117 | -8,819 |

[^67]| Thousand euros ${ }^{1}$ | 2008 | 2009 | 2010 | 20102011 |  | II | III | IV ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | 1 |  |  |  |
| I. Interest margin | 7,980 | 2,652 | 1,629 | 1,629 | 351 | 1,144 | 1,761 | 1,959 |
| II. Net commissions | 149,874 | 127,410 | 109,165 | 109,165 | 26,048 | 50,423 | 73,058 | 80,639 |
| Commission revenues | 172,344 | 144,373 | 126,055 | 126,055 | 29,798 | 57,899 | 84,174 | 92,768 |
| Order processing and execution | 62,345 | 53,988 | 38,176 | 38,176 | 10,080 | 19,345 | 27,974 | 30,889 |
| Placement and underwriting | 4,847 | 2,989 | 2,748 | 2,748 | 350 | 1,181 | 2,289 | 2,483 |
| Deposit and entry of securities | 676 | 509 | 366 | 366 | 97 | 191 | 288 | 360 |
| Portfolio management | 21,137 | 19,633 | 19,489 | 19,489 | 3,818 | 6,760 | 9,572 | 10,438 |
| Design and advisory services | 4,962 | 2,806 | 3,618 | 3,618 | 1,147 | 2,634 | 4,007 | 4,337 |
| Stock search and placement | 0 | 0 | 304 | 304 | 174 | 538 | 61 | 61 |
| Market credit transactions | 10 | 28 | 27 | 27 | 10 | 13 | 24 | 27 |
| Marketing CIS | 31,287 | 23,966 | 23,946 | 23,946 | 5,828 | 11,097 | 16,514 | 18,164 |
| Other | 47,081 | 40,453 | 37,381 | 37,381 | 8,294 | 16,141 | 23,445 | 26,011 |
| Commission expenses | 22,470 | 16,963 | 16,890 | 16,890 | 3,750 | 7,476 | 11,116 | 12,129 |
| III. Profit from financial investments | -1,176 | 1,709 | 456 | 456 | 151 | -54 | -293 | -73 |
| IV. Exchange differences and other op products and expenses | 3,526 | -1,111 | -1,416 | -1,416 | -455 | -1,306 | -1,446 | -1,605 |
| V. Gross margin | 160,204 | 130,661 | 109,834 | 109,834 | 26,095 | 50,207 | 73,080 | 80,920 |
| VI. Operating profit | 20,377 | 9,090 | 9,457 | 9,457 | 3,444 | 5,568 | 6,168 | 6,640 |
| VII. Profit from continuing operations | 14,372 | 4,862 | 6,452 | 6,452 | 3,298 | 5,289 | 6,232 | 6,839 |
| VIII. Net profit for the year | 14,372 | 4,862 | 6,452 | 6,452 | 3,298 | 5,289 | 6,232 | 6,839 |

[^68]Income statement. Portfolio management companies
TABLE 2.10


[^69]|  | Surplus |  | Number of firms according to surplus percentage |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Thousand euros | Total amount | \% ${ }^{2}$ | < 50 | < 100 | < 150 | < 200 | < 300 | < 400 | < 500 | < 750 | < 1000 | > 1000 |
| Total | 1,493,987 | 346,25 | 13 | 14 | 11 | 9 | 13 | 11 | 9 | 9 | 6 | 6 |
| Broker-dealers | 1,407,599 | 369,72 | 3 | 3 | 3 | 4 | 9 | 8 | 7 | 6 | 3 | 3 |
| Brokers | 69,564 | 196,92 | 9 | 9 | 8 | 4 | 4 | 2 | 2 | 3 | 3 | 31 |
| Portfolio management companies | 16,824 | 109,04 | 1 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |

1 Available data: September 2011.
2 Average percentage is weighted by the required equity of each firm. 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 tax ${ }^{1,2}$

|  |  | Number of companies according to their annualised return |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Average $^{3}$ | Losses | $\mathbf{0 - 5 \%}$ | $\mathbf{6 - 1 5 \%}$ | $\mathbf{1 6 - 3 0 \%}$ | $\mathbf{3 1 - 4 5 \%}$ | $\mathbf{4 6 - 6 0 \%}$ | $\mathbf{6 1 - 7 5 \%}$ | $\mathbf{7 6 - 1 0 0 \%}$ | $\mathbf{> 1 0 0 \%}$ |
| Total | 12.50 | 32 | 20 | 21 | 13 | 6 | 2 | 1 | 3 | 3 |
| Broker-dealers | 12.90 | 13 | 11 | 12 | 8 | 3 | 0 | 0 | 2 | 1 |
| Brokers | 8.08 | 18 | 7 | 7 | 4 | 3 | 2 | 1 | 1 | 2 |
| Portfolio management companies | 3.65 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |

1 ROE has been calculated as:

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

Own Funds = Share capital + Share premium + Reserves - Treasury shares + Prior year profits and retained earnings - Dividends and remuneration.
2 Available data: September 2011.
3 Average weighted by own funds, as \%.

Financial advisory companies. Key highlights
TABLE 2.13

|  |  |  |  | 2009 | 2010 |  | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Thousand euros | 2008 | 2009 | 2010 | II | I | II |  |
| ASSETS UNDER ADVISORY SERVICES ${ }^{1}$ |  |  |  |  |  |  |  |
| Total | - | 1,410,985 | 16,120,751 | 1,410,985 | 11,929,643 | 16,120,751 | 16,968,190 |
| Retail clients | - | 364,284 | 1,707,278 | 364,284 | 1,164,130 | 1,707,278 | 2,090,669 |
| Professional clients | - | 1,046,702 | 14,321,020 | 1,046,702 | 10,746,313 | 14,321,020 | 14,786,650 |
| Other | - | 0 | 92,453 | 0 | 19,200 | 92,453 | 90,871 |
| COMMISSION REVENUE ${ }^{2}$ |  |  |  |  |  |  |  |
| Total | - | 3,183 | 21,863 | 3,183 | 7,783 | 21,863 | 14,113 |
| Commission revenue | - | 3,183 | 21,747 | 3,183 | 7,726 | 21,747 | 14,077 |
| Other revenue | - | 0 | 116 | 0 | 57 | 116 | 36 |
| SHAREHOLDERS' EQUITY |  |  |  |  |  |  |  |
| Total | - | 1,500 | 10,224 | 1,500 | 9,312 | 10,224 | 10,363 |
| Share capital | - | 1,043 | 3,014 | 1,043 | 2,379 | 3,014 | 3,386 |
| Reserves and retained earnings | - | 36 | 384 | 36 | 3,333 | 384 | 2,808 |
| Profit for the year ${ }^{2}$ | - | 421 | 6,826 | 421 | 3,600 | 6,826 | 4,169 |

1 Data at end of period. Half-yearly.
2 Accumulated amounts from start of year up to last day of each six-month period.

## 3 Collective investment schemes ${ }^{\text {a }}$

Number, management companies and depositories of collective investment
TABLE 3.1 schemes registered at the CNMV

|  | 2008 | 2009 | 2010 | 2010 | 2011 | II | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | 1 |  |  |  |
| Total financial CIS | 6,354 | 5,892 | 5,627 | 5,627 | 5,603 | 5,551 | 5,491 | 5,480 |
| Mutual funds | 2,943 | 2,593 | 2,429 | 2,429 | 2,436 | 2,410 | 2,356 | 2,349 |
| Investment companies | 3,347 | 3,232 | 3,133 | 3,133 | 3,105 | 3,077 | 3,070 | 3,064 |
| Funds of hedge funds | 40 | 38 | 32 | 32 | 29 | 28 | 28 | 28 |
| Hedge funds | 24 | 29 | 33 | 33 | 33 | 36 | 37 | 36 |
| Total real estate CIS | 18 | 16 | 16 | 16 | 16 | 16 | 15 | 14 |
| Real estate mutual funds | 9 | 8 | 8 | 8 | 8 | 8 | 6 | 6 |
| Real estate investment companies | 9 | 8 | 8 | 8 | 8 | 8 | 9 | 8 |
| Foreign CIS marketed in Spain | 563 | 582 | 660 | 660 | 669 | 695 | 695 | 733 |
| Foreign funds marketed in Spain | 312 | 324 | 379 | 379 | 383 | 395 | 395 | 424 |
| Foreign companies marketed in Spain | 251 | 258 | 281 | 281 | 286 | 300 | 300 | 309 |
| CIS management companies | 120 | 120 | 123 | 123 | 120 | 118 | 117 | 115 |
| CIS depositories | 125 | 124 | 114 | 114 | 113 | 107 | 101 | 98 |

1 Available data: November 2011.

## Number of unit-holders and shareholders of collective investment schemes

TABLE 3.2

|  | 2008 | 2009 | 2010 | 20102011 |  | II | III ${ }^{1}$ | IV ${ }^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | 1 |  |  |  |
| Total financial CIS | 6,358,753 | 5,895,009 | 5,578,524 | 5,578,524 | 5,575,859 | 5,460,738 | 5,358,838 | 5,322,279 |
| Mutual funds | 5,923,352 | 5,475,403 | 5,160,889 | 5,160,889 | 5,160,482 | 5,044,106 | 4,942,074 | 4,906,587 |
| Investment companies | 435,401 | 419,606 | 417,635 | 417,635 | 415,377 | 416,632 | 416,764 | 415,692 |
| Total real estate CIS | 98,327 | 84,511 | 76,223 | 76,223 | 34,690 | 32,906 | 32,356 | 32,625 |
| Real estate mutual funds | 97,390 | 83,583 | 75,280 | 75,280 | 33,747 | 31,963 | 31,412 | 31,682 |
| Real estate investment companies | 937 | 928 | 943 | 943 | 943 | 943 | 944 | 943 |
| Foreign CIS marketed in Spain ${ }^{3}$ | 593,488 | 685,094 | 865,767 | 865,767 | 855,877 | 856,882 | 803,801 |  |
| Foreign funds marketed in Spain | 102,922 | 139,102 | 193,233 | 193,233 | 197,965 | 195,525 | 185,665 |  |
| Foreign companies marketed in Spain | 490,566 | 545,992 | 666,534 | 666,534 | 657,912 | 661,357 | 618,136 |  |

1 Provisional data for foreign CIS marketed in Spain.
2 Available data: October 2011. These data are sent quarterly by Investment Companies and foreign CIS and so the months which do not coincide with the end of the quarter have no available data.
3 Does not include data of ETF.

## Assets of collective investment schemes

TABLE 3.3

| Million euros | 2008 | 2009 | 2010 | 20102011 |  |  | III ${ }^{1}$ | IV ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I | II |  |  |
| Total financial CIS | 200,522,4 | 196,472,5 | 170,073,1 | 170,073,1 | 170,919,4 | 166,446,6 | 157,942,6 | 158,629,3 |
| Mutual funds ${ }^{3}$ | 175,865,5 | 170,547,7 | 143,918,2 | 143,918,2 | 144,428,0 | 140,351,3 | 134,033,7 | 134,143,1 |
| Investment companies | 24,656,9 | 25,924,8 | 26,155,0 | 26,155,0 | 26,491,4 | 26,095,4 | 23,908,9 | 24,486,1 |
| Total real estate CIS | 7,778,8 | 6,773,7 | 6,437,5 | 6,437,5 | 6,403,6 | 6,313,7 | 6,260,8 | 4,869,4 |
| Real estate mutual funds | 7,406,9 | 6,465,1 | 6,115,6 | 6,115,6 | 6,083,3 | 5,995,5 | 4,597,3 | 4,552,7 |
| Real estate investment companies | 371,9 | 308,6 | 321,9 | 321,9 | 320,3 | 318,2 | 1,663,4 | 316,7 |
| Total foreign CIS marketed in Spain ${ }^{4}$ | 18,254,8 | 25,207,2 | 36,692,9 | 36,692,9 | 37,636,4 | 35,582,2 | 30,967,3 |  |
| Foreign funds marketed in Spain | 3,352,0 | 5,215,1 | 8,535,9 | 8,535,9 | 8,092,4 | 7,303,2 | 6,446,0 |  |
| Foreign companies marketed in Spain | 14,902,8 | 19,992,0 | 28,156,9 | 28,156,9 | 29,544,0 | 28,279,0 | 24,521,3 |  |

[^70][^71]| Million euros | 2008 | 2009 | 2010 | 2010 |  | 2011 |  | $111{ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | III | IV | 1 | II |  |
| Assets | 175,865.5 | 170,547.7 | 143,918.1 | 152,646.5 | 143,918.2 | 144,428.0 | 140,351.3 | 134,033.7 |
| Financial investment portfolio | 166,384.7 | 163,165.5 | 137,295.4 | 144,724.4 | 137,296.1 | 137,441.4 | 133,666.7 | 127,577.1 |
| Domestic portfolio | 107,347.7 | 100,642.6 | 89,630.2 | 91,413.1 | 89,632.4 | 92,205.1 | 91,324.1 | 90,914.4 |
| Debt securities | 81,904.6 | 74,628.9 | 68,575.1 | 68,366.9 | 68,574.5 | 71,784.6 | 70,905.2 | 72,151.4 |
| Equity instruments | 4,023.2 | 4,741.0 | 3,829.2 | 3,994.8 | 3,829.2 | 3,990.3 | 3,944.8 | 3,179.1 |
| Collective investment schemes | 10,134.3 | 9,041.5 | 7,338.6 | 8,415.2 | 7,338.6 | 6,338.7 | 6,387.3 | 6,192.3 |
| Deposits in credit institutions | 10,657.6 | 11,552.2 | 9,460.8 | 10,167.6 | 9,460.8 | 9,634.7 | 9,665.8 | 9,208.1 |
| Derivatives | 627.9 | 679.0 | 426.2 | 467.6 | 429.0 | 456.5 | 420.9 | 183.4 |
| Other | 0.1 | 0.0 | 0.4 | 1.0 | 0.4 | 0.3 | 0.0 | 0.0 |
| Foreign portfolio | 59,035.2 | 62,487.1 | 47,626.5 | 53,272.4 | 47,625.1 | 45,198.9 | 42,330.3 | 36,656.4 |
| Debt securities | 49,659.8 | 48,435.3 | 30,337.4 | 36,499.7 | 30,337.4 | 26,875.7 | 24,576.1 | 23,293.2 |
| Equity instruments | 5,216.1 | 7,783.2 | 8,385.8 | 8,003.2 | 8,386.4 | 8,604.6 | 8,758.1 | 6,694.9 |
| Collective investment schemes | 3,524.5 | 5,666.4 | 8,404.7 | 8,264.9 | 8,404.7 | 9,252.1 | 8,548.4 | 6,581.2 |
| Deposits in credit institutions | 17.5 | 82.4 | 108.0 | 73.1 | 108.0 | 86.7 | 61.2 | 53.7 |
| Derivatives | 599.5 | 518.7 | 387.1 | 427.4 | 385.1 | 376.5 | 384.2 | 31.4 |
| Other | 17.8 | 1.1 | 3.6 | 4.1 | 3.6 | 3.3 | 2.4 | 2.0 |
| Doubtful, delinquent or in litigation investments | 1.8 | 35.8 | 38.6 | 38.9 | 38.6 | 37.4 | 12.2 | 6.3 |
| Intangible fixed assets | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Property, plant and equipment | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cash | 8,703.2 | 7,267.7 | 6,531.4 | 7,933.3 | 6,531.3 | 6,876.8 | 6,459.0 | 6,000.3 |
| Net balance (debtors/creditors) | 777.7 | 114.5 | 91.4 | -11.2 | 90.7 | 109.8 | 225.5 | 456.3 |

1 Does not include information on hedge funds and funds of hedge funds as Circular 3/2008 establishes a different deadline for reporting accounting information to CNMV.
2 Provisional data.

Investment companies asset allocation
TABLE 3.5

| Million euros | 2008 | 2009 | 2010 | 2010 |  | 2011 |  | $1 \mathrm{II}{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | III | IV | I | II |  |
| Assets | 24,656.9 | 25,924.8 | 26,155.0 | 26,131.5 | 26,155.0 | 26,491.4 | 26,095.4 | 23,908.9 |
| Financial investment portfolio | 23,446.9 | 24,813.5 | 25,187.3 | 25,015.5 | 25,187.1 | 25,262.0 | 24,915.3 | 22,592.7 |
| Domestic portfolio | 16,176.3 | 13,514.3 | 12,881.4 | 13,035.9 | 12,880.2 | 12,864.2 | 12,848.1 | 12,405.1 |
| Debt securities | 10,435.1 | 7,400.5 | 5,435.9 | 5,717.5 | 5,435.9 | 5,870.6 | 6,628.9 | 7,021.7 |
| Equity instruments | 3,214.9 | 3,376.3 | 2,988.6 | 2,945.3 | 2,989.5 | 3,033.8 | 2,993.4 | 2,663.5 |
| Collective investment schemes | 1,108.8 | 1,091.1 | 758.7 | 806.5 | 756.5 | 801.9 | 815.7 | 741.8 |
| Deposits in credit institutions | 1,383.5 | 1,631.5 | 3,675.2 | 3,546.8 | 3,675.2 | 3,133.2 | 2,381.5 | 1,963.5 |
| Derivatives | 9.8 | -6.6 | -5.9 | -5.8 | -5.9 | -4.9 | -2.1 | -17.0 |
| Other | 24.4 | 21.7 | 29.0 | 25.7 | 29.0 | 29.6 | 30.6 | 31.6 |
| Foreign portfolio | 7,267.8 | 11,294.2 | 12,298.1 | 11,971.9 | 12,300.0 | 12,390.9 | 12,061.0 | 10,181.8 |
| Debt securities | 2,609.6 | 4,606.6 | 3,606.8 | 4,001.8 | 3,606.8 | 3,407.6 | 3,241.5 | 2,948.1 |
| Equity instruments | 2,014.6 | 3,559.3 | 4,166.0 | 3,852.6 | 4,166.0 | 4,381.9 | 4,264.5 | 3,432.9 |
| Collective investment schemes | 2,486.4 | 2,987.4 | 4,390.5 | 3,933.9 | 4,392.6 | 4,415.0 | 4,349.3 | 3,670.2 |
| Deposits in credit institutions | 28.9 | 26.3 | 12.1 | 44.5 | 12.1 | 47.1 | 45.4 | 13.4 |
| Derivatives | 120.5 | 113.0 | 119.9 | 134.9 | 119.7 | 135.1 | 157.8 | 113.7 |
| Other | 7.8 | 1.6 | 2.8 | 4.3 | 2.8 | 4.2 | 2.4 | 3.5 |
| Doubtful, delinquent or in litigation investments | 2.8 | 4.9 | 7.9 | 7.7 | 6.9 | 6.9 | 6.3 | 5.9 |
| Intangible fixed assets | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Property, plant and equipment | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 |
| Cash | 1,021.0 | 976.4 | 832.0 | 903.3 | 832.1 | 1,014.6 | 946.9 | 951.4 |
| Net balance (debtors/creditors) | 188.8 | 134.8 | 135.5 | 212.6 | 135.6 | 214.6 | 233.0 | 364.6 |

1 Provisional data.

Financial mutual funds: Number, unit holders and assets by type of fund ${ }^{1}$
TABLE 3.6

|  | 2008 | 2009 | 2010 | 2010 | 2011 | II | III | IV ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| NUMBER OF FUNDS |  |  |  |  |  |  |  |  |
| Total mutual funds | 2,912 | 2,536 | 2,408 | 2,408 | 2,417 | 2,389 | 2,341 | 2,335 |
| Fixed-income ${ }^{3}$ | 629 | 582 | 537 | 537 | 543 | 530 | 520 | 517 |
| Mixed fixed-income ${ }^{4}$ | 195 | 169 | 160 | 160 | 158 | 152 | 146 | 145 |
| Mixed equity ${ }^{5}$ | 202 | 165 | 138 | 138 | 136 | 132 | 130 | 129 |
| Euro equity ${ }^{6}$ | 237 | 182 | 172 | 172 | 171 | 157 | 153 | 151 |
| International equity ${ }^{7}$ | 330 | 242 | 232 | 232 | 222 | 222 | 222 | 222 |
| Guaranteed fixed-income | 260 | 233 | 276 | 276 | 303 | 324 | 335 | 339 |
| Guaranteed equity ${ }^{8}$ | 590 | 561 | 499 | 499 | 485 | 470 | 436 | 436 |
| Global funds | 469 | 187 | 192 | 192 | 197 | 203 | 204 | 204 |
| Passive management ${ }^{9}$ | - | 69 | 61 | 61 | 61 | 57 | 59 | 58 |
| Absolute return ${ }^{9}$ | - | 146 | 141 | 141 | 141 | 142 | 136 | 134 |
| UNIT HOLDERS |  |  |  |  |  |  |  |  |
| Total mutual funds | 5,923,345 | 5,475,403 | 5,160,889 | 5,160,889 | 5,160,482 | 5,044,106 | 4,942,074 | 4,906,587 |
| Fixed-income ${ }^{3}$ | 2,204,652 | 2,041,487 | 1,622,664 | 1,622,664 | 1,525,292 | 1,466,938 | 1,419,006 | 1,407,513 |
| Mixed fixed-income ${ }^{4}$ | 277,629 | 290,151 | 270,341 | 270,341 | 251,992 | 238,275 | 227,046 | 223,213 |
| Mixed equity ${ }^{5}$ | 209,782 | 182,542 | 171,336 | 171,336 | 162,861 | 156,631 | 151,551 | 149,714 |
| Euro equity ${ }^{6}$ | 377,545 | 299,353 | 266,395 | 266,395 | 253,365 | 248,355 | 247,166 | 245,699 |
| International equity ${ }^{7}$ | 467,691 | 458,097 | 501,138 | 501,138 | 493,052 | 493,057 | 465,814 | 459,109 |
| Guaranteed fixed-income | 538,799 | 570,963 | 790,081 | 790,081 | 967,561 | 990,997 | 1,019,905 | 1,025,593 |
| Guaranteed equity ${ }^{8}$ | 1,402,947 | 1,188,304 | 1,065,426 | 1,065,426 | 1,027,392 | 981,572 | 946,448 | 939,279 |
| Global funds | 444,300 | 88,337 | 105,720 | 105,720 | 114,244 | 124,088 | 130,519 | 128,614 |
| Passive management ${ }^{9}$ | - | 85,403 | 90,343 | 90,343 | 85,254 | 82,371 | 95,948 | 96,047 |
| Absolute return ${ }^{9}$ | - | 270,766 | 277,445 | 277,445 | 279,469 | 261,822 | 238,671 | 231,806 |
| ASSETS (million euros) |  |  |  |  |  |  |  |  |
| Total mutual funds | 175,865.2 | 170,547.7 | 143,918.2 | 143,918.2 | 144,428.0 | 140,351.3 | 134,033.7 | 134,143.1 |
| Fixed-income ${ }^{3}$ | 92,813.1 | 84,657.2 | 56,614.6 | 56,614.6 | 51,565.6 | 49,449.9 | 48,228.6 | 48,077.1 |
| Mixed fixed-income ${ }^{4}$ | 5,803.0 | 8,695.5 | 7,319.0 | 7,319.0 | 6,570.0 | 6,251.9 | 5,715.8 | 5,668.3 |
| Mixed equity ${ }^{5}$ | 3,958.8 | 3,879.6 | 3,470.5 | 3,470.5 | 3,484.5 | 3,345.6 | 2,897.5 | 2,967.8 |
| Euro equity ${ }^{6}$ | 5,936.9 | 6,321.6 | 5,356.8 | 5,356.8 | 5,656.3 | 5,687.2 | 4,610.8 | 4,824.2 |
| International equity ${ }^{7}$ | 4,256.6 | 5,902.4 | 8,037.3 | 8,037.3 | 7,896.1 | 7,751.6 | 6,028.4 | 6,370.3 |
| Guaranteed fixed-income | 21,281.6 | 21,033.4 | 26,180.2 | 26,180.2 | 32,084.4 | 32,742.1 | 34,241.7 | 34,266.8 |
| Guaranteed equity ${ }^{8}$ | 30,742.4 | 25,665.8 | 22,046.5 | 22,046.5 | 21,181.6 | 19,827.6 | 18,699.9 | 18,535.9 |
| Global funds | 11,072.8 | 3,872.5 | 4,440.3 | 4,440.3 | 5,481.7 | 5,718.1 | 5,154.3 | 5,284.1 |
| Passive management ${ }^{9}$ | - | 3,216.6 | 2,104.8 | 2,104.8 | 2,193.0 | 2,172.2 | 2,060.0 | 1,904.7 |
| Absolute return ${ }^{9}$ | - | 7,303.0 | 8,348.1 | 8,348.1 | 8,314.8 | 7,405.1 | 6,396.8 | 6,243.9 |

1 Funds which have sent reserved statements, does not include funds in process of dissolution or liquidation.
2 Available data: October 2011.
3 Until 1 Q09 includes: Short-term fixed income, Long-term fixed income, International fixed income and Monetary fixed income. From 2Q09 includes: Euro fixed income, International fixed income and Monetary fixed income. From 3Q11 includes: Euro fixed income, International fixed income, Monetary and Short-term monetary fixed-income. Up to December 2006 included Money market mutual funds.
4 Until 1Q09 includes: Mixed fixed income and International mixed fixed income. From 2 Q 09 includes: Euro mixed fixed income and International mixed fixed income.
5 Until 1Q09 includes: Mixed equity and International mixed equity. From 2Q09 includes: Euro mixed equity and International mixed equity.
6 Until 1Q09 includes: Spanish equity and Euro equity. From 2Q09 includes: Euro equity (which now includes Spanish equity).
7 Until 1Q09 includes: International equity Europe, International equity Japan, International equity USA, International equity Emerging Countries and International equity Others. From 2Q09 includes: International equity.
8 Until 1Q09 includes: Guaranteed equity. From 2Q09 includes: Guaranteed equity and Partial Guarantee.
9 New categories from 2Q09. All Absolute return funds were previously classified as Global funds.

Financial mutual funds: Breakdown of unit-holders and assets by type of unit-holder

|  | 2008 | 2009 | 2010 | 20102011 |  | II | III | IV ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | 1 |  |  |  |
| UNIT-HOLDERS |  |  |  |  |  |  |  |  |
| Total mutual funds | 5,923,352 | 5,475,403 | 5,160,889 | 5,160,889 | 5,160,482 | 5,044,106 | 4,942,074 | 4,906,587 |
| Natural persons | 5,754,049 | 5,322,214 | 5,019,902 | 5,019,902 | 5,020,705 | 4,907,283 | 4,808,616 | 4,774,665 |
| Residents | 5,677,123 | 5,252,126 | 4,954,891 | 4,954,891 | 4,955,440 | 4,843,565 | 4,746,165 | 4,712,779 |
| Non-residents | 76,926 | 70,088 | 65,011 | 65,011 | 65,265 | 63,718 | 62,451 | 61,886 |
| Legal persons | 169,303 | 153,189 | 140,987 | 140,987 | 139,777 | 136,823 | 133,458 | 131,922 |
| Credit institutions | 1,713 | 674 | 524 | 524 | 500 | 491 | 507 | 543 |
| Other resident agents | 166,041 | 151,479 | 139,550 | 139,550 | 138,402 | 135,505 | 132,160 | 130,594 |
| Non-resident institutions | 1,549 | 1,036 | 913 | 913 | 875 | 827 | 791 | 785 |
| ASSETS (million euros) |  |  |  |  |  |  |  |  |
| Total mutual funds | 175,865.5 | 170,547.7 | 143,918.1 | 143,918.1 | 144,428.0 | 140,351.3 | 134,033.7 | 134,143.1 |
| Natural persons | 135,756.2 | 132,860.5 | 113,660.6 | 113,660.6 | 115,233.0 | 111,732.9 | 108,000.6 | 107,952.9 |
| Residents | 133,878.1 | 130,954.4 | 111,900.1 | 111,900.1 | 113,442.6 | 110,123.1 | 106,440.9 | 106,390.1 |
| Non-residents | 1,878.1 | 1,906.0 | 1,760.5 | 1,760.5 | 1,790.3 | 1,609.9 | 1,559.7 | 1,562.8 |
| Legal persons | 40,109.3 | 37,687.2 | 30,257.5 | 30,257.5 | 29,195.0 | 28,618.3 | 26,033.1 | 26,190.3 |
| Credit institutions | 4,193.0 | 2,572.0 | 1,926.1 | 1,926.1 | 1,869.9 | 1,854.3 | 1,477.0 | 1,498.7 |
| Other resident agents | 34,738.0 | 34,065.1 | 27,644.6 | 27,644.6 | 26,666.9 | 26,205.8 | 24,107.8 | 24,248.3 |
| Non-resident institutions | 1,178.4 | 1,050.1 | 686.9 | 686.9 | 658.2 | 558.3 | 448.3 | 443.3 |

## Subscriptions and redemptions of financial mutual funds by category ${ }^{1}$

TABLE 3.8


[^72]Change in assets of financial mutual funds by category:
TABLE 3.9
Net subscription/redemptions and yields


[^73]| As \% of average daily assets | 2008 | $2009{ }^{1}$ | 2010 | 2010 |  | 2011 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | III | IV | I | II | III |
| MANAGEMENT YIELDS |  |  |  |  |  |  |  |  |
| Total mutual funds | -4.09 | 6.13 | 1.09 | 1.82 | 0.17 | 0.89 | 0.27 | -2.45 |
| Fixed-income | 2.53 | 2.69 | 0.78 | 0.81 | -0.18 | 0.62 | 0.51 | 0.14 |
| Mixed fixed-income | -5.75 | 9.34 | 0.61 | 2.13 | -0.25 | 0.95 | 0.41 | -3.33 |
| Mixed equity | -23.30 | 16.44 | 0.11 | 4.95 | 1.19 | 2.16 | 0.16 | -10.57 |
| Euro equity | -47.02 | 31.02 | -3.05 | 9.84 | 1.62 | 5.73 | 0.15 | -22.4 |
| International equity | -49.55 | 33.16 | 14.8 | 5.48 | 8.11 | -0.98 | -0.68 | -17.26 |
| Guaranteed fixed-income | 3.39 | 4.10 | -0.11 | 1.05 | -1.18 | 0.94 | 0.44 | 1.44 |
| Guaranteed equity | -1.88 | 5.08 | -0.46 | 1.44 | -1.07 | 0.71 | 0.01 | -0.54 |
| Global funds | -7.36 | 10.82 | 4.15 | 2.97 | 2.17 | 0.88 | 0.13 | -8.51 |
| Passive management | - | - | -2.50 | 6.43 | 0.41 | 3.74 | -0.21 | -13.81 |
| Absolute return | - | - | 2.49 | 1.48 | 0.8 | 0.23 | -0.07 | -2.60 |
| EXPENSES. MANAGEMENT FEE |  |  |  |  |  |  |  |  |
| Total mutual funds | 0.87 | 0.87 | 0.91 | 0.23 | 0.24 | 0.23 | 0.23 | 0.23 |
| Fixed-income | 0.58 | 0.63 | 0.65 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Mixed fixed-income | 1.14 | 1.14 | 1.20 | 0.30 | 0.30 | 0.29 | 0.29 | 0.28 |
| Mixed equity | 1.54 | 1.58 | 1.65 | 0.41 | 0.41 | 0.40 | 0.39 | 0.39 |
| Euro equity | 1.60 | 1.75 | 1.78 | 0.45 | 0.45 | 0.44 | 0.44 | 0.46 |
| International equity | 1.69 | 1.79 | 1.84 | 0.45 | 0.50 | 0.44 | 0.43 | 0.44 |
| Guaranteed fixed-income | 0.49 | 0.65 | 0.62 | 0.16 | 0.17 | 0.16 | 0.18 | 0.19 |
| Guaranteed equity | 1.29 | 1.26 | 1.24 | 0.30 | 0.31 | 0.30 | 0.30 | 0.32 |
| Global funds | 1.04 | 1.08 | 1.06 | 0.27 | 0.30 | 0.29 | 0.27 | 0.27 |
| Passive management | - | - | 0.72 | 0.18 | 0.19 | 0.19 | 0.18 | 0.17 |
| Absolute return | - | - | 1.06 | 0.26 | 0.28 | 0.29 | 0.26 | 0.25 |
| EXPENSES. DEPOSITORY FEE |  |  |  |  |  |  |  |  |
| Total mutual funds | 0.08 | 0.09 | 0.09 | 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 | 0.09 | 0.10 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Mixed equity | 0.11 | 0.10 | 0.12 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Euro equity | 0.10 | 0.10 | 0.11 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| International equity | 0.12 | 0.12 | 0.12 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Guaranteed fixed-income | 0.07 | 0.08 | 0.07 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Guaranteed equity | 0.11 | 0.11 | 0.10 | 0.02 | 0.03 | 0.02 | 0.02 | 0.02 |
| Global funds | 0.09 | 0.08 | 0.09 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Passive management | - | - | 0.07 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Absolute return | - | - | 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 $1 / 2009$ as from the second quarter of 2009.

Return of investment funds. Breakdown by category

| As \% | 2008 | $2009{ }^{1}$ | 2010 | 2010 |  | 2011 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | III | IV | I | II | III |
| Total mutual funds | -4.21 | 5.73 | 0.35 | 1.64 | -0.04 | 0.95 | 0.03 | -2.37 |
| Fixed-income | 2.06 | 1.91 | 0.11 | 0.63 | -0.35 | 0.63 | 0.33 | 0.01 |
| Mixed fixed-income | -7.14 | 6.85 | -0.54 | 1.82 | -0.56 | 0.9 | 0.09 | -3.47 |
| Mixed equity | -22.21 | 16.47 | -0.98 | 4.67 | 0.78 | 2.23 | -0.31 | -10.13 |
| Euro equity | -39.78 | 32.41 | -2.94 | 10.11 | 1.27 | 6.11 | -0.45 | -19.67 |
| International equity | -41.71 | 37.28 | 14.22 | 5.35 | 8.01 | -0.49 | -1.15 | -15.70 |
| Guaranteed fixed-income | 3.29 | 3.81 | -0.67 | 0.89 | -1.28 | 0.89 | 0.36 | 1.28 |
| Guaranteed equity | -2.61 | 3.56 | -1.79 | 1.20 | -1.45 | 0.71 | -0.48 | -0.76 |
| Global funds | -8.64 | 10.90 | 3.22 | 2.80 | 1.87 | 0.98 | -0.14 | -8.10 |
| Passive management | - | - | -2.36 | 6.32 | 0.31 | 3.74 | -0.30 | -13.94 |
| Absolute return | - | - | 1.53 | 1.17 | 0.58 | 0.28 | -0.35 | -2.71 |

[^74]|  | 2008 | 2009 | 2010 | 2010 |  | 2011 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | III | IV | I | II | III ${ }^{1}$ |
| HEDGE FUNDS |  |  |  |  |  |  |  |  |
| Unit-holders | 1,589 | 1,917 | 1,852 | 1,925 | 1,852 | 1,958 | 2,022 | 2,060 |
| Net assets (million euros) | 539.4 | 652.0 | 646.2 | 639.3 | 646.2 | 693.5 | 738.9 | 714.6 |
| Subscriptions (million euros) | 390.4 | 248.7 | 236.6 | 21.2 | 31.0 | 56.0 | 58.5 | 22.9 |
| Redemptions (million euros) | 258.3 | 198.3 | 268.6 | 73.2 | 42.6 | 20.2 | 27.8 | 7.5 |
| Net subscriptions/redemptions (million euros) | 132.7 | 50.4 | -32.0 | -52.1 | -11.6 | 35.9 | 30.7 | 15.4 |
| Net yields (million euros) | -39.1 | 62.2 | 26.3 | 17.4 | 18.4 | 11.5 | 3.0 | -39.8 |
| Return (\%) | -4.82 | 14.94 | 5.37 | 2.97 | 3.11 | 1.79 | 0.51 | -5.00 |
| Management yields (\%) ${ }^{2}$ | -2.51 | 13.76 | 6.33 | 3.24 | 3.45 | 2.38 | 0.92 | -5.21 |
| Management fee (\%) ${ }^{2}$ | 2.50 | 2.55 | 1.91 | 0.47 | 0.49 | 0.48 | 0.41 | 0.25 |
| Financing expenses (\%) ${ }^{2}$ | 0.16 | 0.11 | 0.07 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 |
| FUNDS OF HEDGE FUNDS |  |  |  |  |  |  |  |  |
| Unit-holders | 8,516 | 5,321 | 4,404 | 4,901 | 4,404 | 4,240 | 4,137 | 4,087 |
| Net assets (million euros) | 1,021.3 | 810.2 | 694.9 | 726.8 | 694.9 | 667.2 | 636.1 | 624.8 |
| Subscriptions (million euros) | 967.3 | 302.4 | 47.9 | 13.9 | 10.4 | 2.3 | 4.2 | - |
| Redemptions (million euros) | 700.9 | 585.4 | 184.8 | 23.7 | 57.2 | 29.9 | 28.4 | - |
| Net subscriptions/redemptions (million euros) | 266.4 | -283.0 | -136.9 | -9.8 | -46.8 | -27.6 | -24.3 | - |
| Net yields (million euros) | -245.7 | 71.9 | 21.7 | -1.3 | 14.9 | -0.14 | -6.8 | - |
| Return (\%) | -17.8 | 7.85 | 3.15 | -0.1 | 2.13 | -0.01 | -1.03 | -1.24 |
| Management yields (\%) ${ }^{3}$ | -17.84 | 11.54 | 4.38 | 0.14 | 2.46 | 0.36 | -0.69 | - |
| Management fee (\%) ${ }^{3}$ | 1.63 | 1.34 | 1.25 | 0.31 | 0.32 | 0.31 | 0.32 | - |
| Depositary fee (\%) ${ }^{3}$ | 0.11 | 0.11 | 0.08 | 0.02 | 0.02 | 0.02 | 0.02 | - |

1 Available data: August 2011. Return calculated for period June-August.
2 Percentage of average monthly assets.
3 Percentage of average daily assets.

CIS management companies: Number of portfolios and assets under management ${ }^{1}$
TABLE 3.13

|  | 2008 | 2009 | 2010 | 2010 | 2011 | II | III | IV ${ }^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | I |  |  |  |
| NUMBER OF PORTFOLIOS |  |  |  |  |  |  |  |  |
| Mutual funds | 2,943 | 2,593 | 2,429 | 2,429 | 2,436 | 2,410 | 2,356 | 2,349 |
| Investment companies | 3,240 | 3,135 | 3,068 | 3,068 | 3,059 | 3,024 | 3,015 | 3,014 |
| Funds of hedge funds | 40 | 38 | 32 | 32 | 29 | 28 | 28 | 28 |
| Hedge funds | 24 | 28 | 31 | 32 | 32 | 35 | 36 | 35 |
| Real estate mutual funds | 9 | 8 | 8 | 8 | 8 | 8 | 6 | 6 |
| Real estate investment companies | 9 | 8 | 8 | 8 | 8 | 8 | 9 | 8 |
| ASSETS UNDER MANAGEMENT (million euros) |  |  |  |  |  |  |  |  |
| Mutual funds | 175,865.5 | 170,547.7 | 143,918.2 | 143,918.2 | 144,428.0 | 140,351.3 | 134,033.7 | 134,143.1 |
| Investment companies | 23,656.1 | 24,952.8 | 25,361.3 | 25,361.3 | 25,835.9 | 25,399.1 | 23,321.3 | 23,872.8 |
| Funds of hedge funds ${ }^{3}$ | 1,021.3 | 810.2 | 694.9 | 694.9 | 667.2 | 636.1 | 624.8 |  |
| Hedge funds ${ }^{3}$ | 539.4 | 652.0 | 643.5 | 643.5 | 666.3 | 710.4 | 682.7 |  |
| Real estate mutual funds | 7,406.9 | 6,465.1 | 6,115.6 | 6,115.6 | 6,083.3 | 5,995.5 | 4,597.3 | 4,552.7 |
| Real estate investment companies | 371.9 | 308.5 | 321.9 | 321.9 | 320.3 | 318.2 | 1,663.4 | 316.7 |

[^75]

1 Does not include the investment volume and number of investors of ETF.
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 $\mathrm{CIS}^{1}$

TABLE 3.15

|  | 2008 | 2009 | 2010 | 2010 | 2011 | II | III | IV ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | IV | 1 |  |  |  |
| FUNDS |  |  |  |  |  |  |  |  |
| Number | 9 | 8 | 7 | 7 | 7 | 7 | 6 | 6 |
| Unit-holders | 97,390 | 83,583 | 75,280 | 75,280 | 33,747 | 31,963 | 31,412 | 31,682 |
| Net assets (million euros) | 7,406.9 | 6,465.1 | 6,115.6 | 6,115.6 | 6,083.3 | 5,995.5 | 4,597.3 | 4,552.7 |
| Yield (\%) | 0.69 | -8.31 | -4.74 | -0.9 | -0.66 | -0.65 | -1.03 | -0.31 |
| COMPANIES |  |  |  |  |  |  |  |  |
| Number | 9 | 8 | 8 | 8 | 8 | 8 | 9 | 8 |
| Shareholders | 937 | 928 | 943 | 943 | 943 | 943 | 944 | 943 |
| Net assets (million euros) | 371.9 | 308.6 | 321.9 | 321.9 | 320.3 | 318.2 | 1,663.4 | 316.7 |

[^76]
[^0]:    1 The closing date for this report was 30 December.
    2 According to interim data from the National Statistics Office (INE).

[^1]:    3 In the closing quarter, main central banks issued a new string of exceptional monetary policy measures. The ECB launched a new covered bond purchasing programme in November, followed in December by a series of temporary measures including two longer-term refinancing operations with maturity of three years, and a reduction in the rating threshold for certain asset-backed securities to be eligible as collateral. These steps stand alongside the concerted action by the ECB, the U.S. Federal Reserve, the Bank of England, the Swiss

[^2]:    Source: Thomson Datastream.

[^3]:    4 Euro-area yield corresponds to Datastream's synthetic index.

[^4]:    Source: Thomson Datastream.
    1 Monthly average of daily data.

[^5]:    Source: Thomson Datastream.

[^6]:    Source: Thomson Datastream.

[^7]:    Source: Thomson Datastream.

[^8]:    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 OMX and the American Stock Exchange.
    2 Incorporating Borsa Italiana as of 2010.
    3 Bolsas y Mercados Españoles. Not including Latibex.
    4 Data for October and November, except BME, which extends to December.

[^9]:    5
    NASDAQ OMX Nordic Exchange.

[^10]:    Source: Thomson Datastream.

[^11]:    Source: Dealogic and CNMV. Data to 30 December 2011.
    1 The "Other" category includes mortgage 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.

[^12]:    Source: Thomson Datastream and Bolsa de Madrid.
    1 Shares capitalising at more than 3\% of the IGBM.
    2 Relative weight (\%) in the IGBM as of July 2011.

[^13]:    Source: Bolsa de Madrid.

[^14]:    6 Average daily trading in 2007, 2008 and 2009 came to $6.59,4.89$ and 3.49 billion euros respectively.

[^15]:    Source: Thomson Datastream.

[^16]:    1 As provided for in Article 35 of the Securities Market Act 24/1988, of 28 July, where Spain is the home Member State, issuers whose shares or debt securities are admitted to trading on an official secondary market or on another regulated market in the European Union must publish and disseminate a half-yearly financial report for the first six months of the year and a second financial report covering the full financial year.
    2 The analysis conducted in this article excludes listed banks resulting from the restructuring processes of savings banks throughout the sample period so as to avoid possible distortions in the time development of the key figures discussed herein. However, the study does include those savings banks which send half-yearly information to the CNMV and which have not undergone major structural changes.
    3 Submitted in the form stipulated in Circular 1/2008.
    4 Except for entities that have issued preferred shares and other special purpose entities constituted for the issuance of fixed income securities and the Spanish Official Credit Institute (Spanish acronym: ICO).

[^17]:    5 For credit institutions, net turnover has been taken to comprise interest and similar revenue, and for insurance companies, premium income for the year from life and non-life-insurance, net of reinsurance.

[^18]:    6 Publication of Royal Decree 485/2009 led to a change in the recording of sales to final consumers, which affected all companies in the sector to a different extent.

[^19]:    7 This is the profit or loss before tax, excluding the results of discontinued activities, which are generally significant business lines or geographical areas which the company has either disposed of, or plans to dispose of, within the next 12 months.

[^20]:    10 Gross financial debt is defined as the sum of debts with credit institutions and issues of debentures and tradable securities.

[^21]:    11 Data obtained from the Boletín Estadístico (Statistics Bulletin), Bank of Spain.

[^22]:    12 Defined as the value adjustments for asset impairment over the doubtful balance.
    13 See footnote 11
    14 Made up of share capital, reserves, share premiums, earnings, valuation adjustments, minority interests, instruments subscribed by the FROB (Fund for Orderly Banking Restructuring) and certain debt issues, less intangible assets.
    15 Articles 1.1 and 1.2 of the aforementioned Royal Decree-Law 2/2011, of 18 February
    16 The calculation of the benchmark Core Tier 1 ratio does not include convertible debentures, generic provisions or certain divestments/gains.

[^23]:    1 This figure is similar to the assets under management by hedge funds, but it is well below the more than 20 trillion dollars of the total global fund industry.
    2 Financial Stability Board (2011). Potential financial stability issues arising from recent trends in ExchangeTraded Funds (ETFs). Available at http://www.financialstabilityboard.org/publications/r_110412b.pdf.

[^24]:    3 Understood as the ratio between the total value of the fund's portfolio net of expenses and the number of units.

[^25]:    4 According to Ramaswamy, S. (2011). Market structures and systemic risk of Exchange-traded funds. BIS Working Paper No. 343. Available at http://www.bis.org/publ/work343.pdf.
    5 Deutsche Bank (2011). In the ETF labyrinth, where does the thread begin? ETF Research-Industry perspective. Available at http://www.etf.db.com/UK/pdf/EN/research/researchresearchSpecial_2011_07_07_ ETF_Industry_Perspective.pdf.

[^26]:    6 According to data from BlackRock, ETF Landscape. H1-2011.

[^27]:    7 See Ramaswamy (2011), op. cit., and Financial Stability Board (FSB) (2011), op. cit.
    8 ESBR (2011). ESRB response to the ESMA discussion paper on "Policy orientations and guidelines for UCITS exchange-traded funds and structured UCITS". Available at http://www.esma.europa.eu/system/files/1ESRB.pdf.
    9 Only Switzerland allows the creation of funds with one single commodity as underlying. The UCITS Directive does allow the creation of exchange-traded funds which replicate indexes of prices of several commodities.

[^28]:    10 In accordance with Directive 2004/39/EC, on markets in financial instruments (MiFID).
    11 CESR (2010). CESR Technical Advice to the European Commission in the context of the MiFID Review - Investor Protection and Intermediaries. CESR/10-859.

[^29]:    12 See Ramaswamy (2011), op. cit.
    13 Exposure in this context is understood in a wide sense which includes any current or potential obligation resulting from using derivatives.

[^30]:    14 See ESRB (2011), op. cit.
    15 Data available at http://www.gold.org/investment/statistics/demand_and_supply_statistics/.

[^31]:    16 See Bradley, H. and Litan, R.E. (2011). ETFs and the present danger to capital formation. Testimony of Harold Bradley and Robert E. Litan before the Subcommittee on Securities, Insurance and Investments of the Senate Banking Committee. Available at http://banking.senate.gov/public/index.cfm?FuseAction=Files. View\&FileStore id=fedd383b-6946-403c-b43d-7ea9723f17f5.

[^32]:    17 Volatility is calculated using the typical deviation of the difference between the weekly variation in naperian logarithms of the value of the benchmark index in euros and the value of the ETF, once the dividends have been reinvested. It is subsequently annualised by multiplying said amount by the square root of 52 .

[^33]:    1 Bernhein, D. and Garrett, D. (1996). "The Determinants and Consequences of Financial Education in the Workplace: Evidence from a Survey of Households". Journal of Public Economics, No. 87, pp. 14871519.

    2401 (k) plans are a type of retirement savings plan in the United States. They were first adopted in the 1980s as an alternative to traditional pension plans, which were exclusively financed by employers. In 401 (k) plans, the contribution of the employer may vary but in general it has the effect of transferring the contributions to the plan to the workers themselves. Around $60 \%$ of U.S. households with people at ages close to retirement have a 401 (k) retirement plan.
    3 Bernhein, D., Garrett, D. and Maki, D. (1997). "Education and Saving: The Long-Term Effects of High School Financial Curriculum Mandates". Journal of Public Economics, No. 87, pp. 1487-1519.

[^34]:    4 Lusardi, A. and Mitchell, O. (2006). Financial Literacy and Planning: Implications for Retirement Wellbeing. NBER Working Paper, No. 17078.
    5 Lusardi, A. and Mitchell, O. (2007). "Baby Boomer Retirement Security: The Role of Planning, Financial Literacy and Housing Wealth". Journal of Monetary Economics, No. 54, pp. 205-224.
    6 Lusardi, A. and Mitchell, O. (2009). How Ordinary People Make Complex Economic Decisions: Financial Literacy and Retirement Readiness. NBER Working Paper, No. 15350.
    7 Bucher-Koenen, T. and Lusardi, A. (2011). Financial Literacy and Retirement Planning in Germany. NBER Working Paper, No. 17110.
    8 SAVE is a survey conducted by the Mannheim Research Institute which aims to improve understanding of the savings behaviour of German households. This survey collects both quantitative information on the amount saved by households in different types of assets, and qualitative information on how savings decisions are taken, the reasons and the attitudes towards consumption and money.

[^35]:    9 Hastings, J. and Tejeda-Ashton, L. (2008). Financial Literacy, Information and Demand Elasticity: Survey and Experimental Evidence from Mexico. NBER Working Paper, No. 14538.
    10 Stango, V. and Zinman, J. (2009). "Exponential Growth Bias and Household Finance". Journal of Finance, Vol. LXIV, No. 6.
    11 Lusardi, A. and Tufano, O. (2009). Debt Literacy, Financial Experiences, and Over-indebtedness. NBER Working Paper, No. 14808.
    12 Hilgert, M., Hogarth, J. and Beverly, S. (2003). "Household Financial Management: The Connection between Knowledge and Behaviour". Federal Reserve Bulletin, pp. 309-322.

[^36]:    13 Van Rooij, M., Lusardi, A. and Alessie, R. (2007). Financial Literacy and Stock Market Participation. NBER Working Paper, No. 13565.
    14 Van Rooij, M., Lusardi, A. and Alessie, R. (2011). Financial Literacy, Retirement Planning, and Household Wealth. NBER Working Paper, No. 17339.
    15 Drexler, A., Fischer, G. and Schoar, A. (2010). "Keeping it simple: Financial Literacy and Rules of Thumb". Development Economics, 7994.

[^37]:    16 These countries include the United States, the United Kingdom, France, Japan, Germany and Australia.

[^38]:    17 OCDE (2005). Recommendations on Principles and Good Practices for Financial Education and Awareness.

[^39]:    www.financial-education.org
    For further details, see FSA (2003). Towards a National Strategy for Financial Capability, and FSA (2004). Building Financial Capability in the UK.
    For further details, see FSA (2006). Financial Capability in the UK: Establishing a Baseline.

[^40]:    21 For further details, see CFEB (2010). Transforming Financial Behaviour: developing interventions that build financial capability.
    22 www.moneyadviceservice.org.uk

[^41]:    23 www.sorted.org.nz
    24 Fair and Accurate Credit Transactions Act (2003), Title V, Financial Literacy and Education Improvement. 25 This agency was created through the Dodd-Frank Act, July 2010, under the umbrella of the U.S. Federal Reserve.

[^42]:    1 CNMV and Bank of Spain (2007). Securities clearing, settlement and registry systems in Europe. Current situation, ongoing initiatives, and recommendations. Joint report by the CNMV and Bank of Spain. Available at http://www.cnmv.es/DocPortal/Publicaciones/Estudios/Sistemas_0712.pdf.

[^43]:    2 The project started in March 2007 when, taking into consideration the study carried out by the Eurosystem, the Governing Council of the European Central Bank reached the conclusion that the T2S was a viable project. As a result of this decision a document was drafted setting out users' requirements, in close collaboration with the CSDs and market participants. In July 2008, the T2S project was initiated and it was decided to assign the technical and operational development of T2S to the Deutsche Bundesbank, the Banco de España, the Banque de France and the Banca d'Italia (the group of central banks known as 4CB). T2S is expected to come into operation in September 2014.
    3 The first report is available at http://ec.europa.eu/internal_market/financial-markets/docs/clearing/ first_giovannini_report_en.pdf and the second at http://ec.europa.eu/internal_market/financial-markets/docs/clearing/second_giovannini_report_en.pdf.
    4 Legislative proposal from the European Commission to the European Parliament and to the Council in September 2010, currently in progress. Details available at http://ec.europa.eu/internal_market/finan-cial-markets/derivatives/index_en.htm\#proposals.

[^44]:    5 Leaders' statement, The Pittsburgh Summit, 24-25 September 2009. Available at http://www.g20.org/images/stories/canalfinan/docs/uk/02pittsburgh.pdf.

[^45]:    6 Royal Decree 116/1992, of 14 February, on the representation of securities by book entry and the clearing and settlement of stock exchange transactions (amended by Royal Decree 2590/1998, of 7 December, on amendments to the legal framework for the securities markets; by Royal Decree 705/2002, of 19 July, regulating the authorisation of issues of local government debt; and by Royal Decree 363/2007, of 16 March).

[^46]:    7 Committee on Payment and Settlement Systems (BIS) and the Technical Committee of IOSCO (2004) Recommendations for Central Counterparties. Available at http://www.bis.org/publ/cpss64.pdf.

[^47]:    8 Article 32 of Royal Decree 116/1992, of 14 February, on the representation of securities by book entry and the clearing and settlement of stock market transactions.

[^48]:    9 This directive was amended by Directive 2009/44/EC, of the European Parliament and of the Council, of 6 May 2009.
    10 Amended by Law 7/2011, of 11 April, amending Law 41/1999, of 12 November, on payment and securities settlement systems, and by Royal Legislative Decree 5/2005, of 11 March, on urgent reforms to drive productivity and for the improvement of public procurement.
    11 The rules even covers the finality of transfer orders and their netting even when such orders have been entered into the system after the insolvency of the participant in certain circumstances (Article 13 of Law 41/1999, of 12 November).

[^49]:    12 Article 44 bis. 4 of the Securities Market Act and Article 56 of Royal Decree 116/1992, of 14 February, on the representation of securities by book entry and the clearing and settlement of stock market transactions.

[^50]:    13 Article 8 of Law 41/1999, of 12 November, on payment and securities settlement systems.
    14 Díez-Picazo, L. (1986). Fundamentos del Derecho civil patrimonial. Vol. 1, pp. 795 ff.

[^51]:    15 Article 33 of Royal Decree 116/1992.
    16 CNMV (2011). Reform proposals for the Spanish clearing, settlement and registry system. Document submitted to public consultation. Available at http://www.cnmv.es/DocPortal/Aldia/reformacyl.pdf.

[^52]:    17 The texts of both consultations are available at http://www.cnmv.es/DocPortal/DocFaseConsulta/ CNMV/CarReformaSistemaCompensacion.pdf (consultation made in February 2010) and http://www. cnmv.es/DocPortal/DocFaseConsulta/CNMV/caratulaconsulta.pdf (consultation made in February 2011).

[^53]:    1 Directive 2009/65/EC of the European Parliament and of the Council, of 13 July 2009, on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities. This directive unifies into one single text Council Directive 85/611/EEC, of 20 December 1985, subsequently amended by the directives which appear in Annex III of Directive 2009/65/EC.
    2 Directive 2010/78/EU, of the European Parliament and of the Council, of 24 November 2010, amending Directives 98/26/EC, 2002/87/EC, 2003/6/EC, 2003/41/EC, 2003/71/EC, 2004/39/EC, 2004/109/EC, 2005/60/EC, 2006/48/EC, 2006/49/EC and 2009/65/EC in respect of the powers of the European Banking Authority, the European Insurance and Occupational Pensions Authority and the European Securities and Markets Authority.
    3 Commission Regulation (EU) 584/2010, of 1 July 2010, implementing Directive 2009/65/EC as regards the form and content of the standard notification letter and UCITS attestation, the use of electronic communication between competent authorities for the purpose of notification, and procedures for on-the--spot verifications and investigations and the exchange of information between competent authorities; and Commission Directive 2010/43/EU, of 1 July 2010, implementing Directive 2009/65/EC regarding organisational requirements, conflicts of interest, conduct of business, risk management and the content of the agreement between a depository and a management company.
    4 Martínez Blasco, M. A. and Racanati, M. (2010). "The UCITS IV Directive". CNMV Bulletin, Quarter II.

[^54]:    5 Munuera, J. and Martín de Diego, A. (2011). "The European Securities and Markets Authority". CNMV Bulletin, Quarter III, 2011.

[^55]:    6 CNMV Circular 2/2011, of 9 June, on Information of Foreign CIS Registered in the CNMV Registries.

[^56]:    7 In addition, it is still mandatory to file the documents which were required by previous legislation: in the case of branches, schedule of activities and structure of the organisation and senior management

[^57]:    8 Regulation (EU) No. 1095/2010, of the European Parliament and of the Council, of 24 November 2010, establishing a European Supervisory Authority (European Securities and Markets Authority).
    9 Commission Regulation (EU) No. 584/2010, of 1 July 2010, implementing Directive 2009/65/EC, of the European Parliament and of the Council, as regards the form and content of the standard notification letter and UCITS attestation, the use of electronic communication between competent authorities for the purpose of notification, and procedures for on-the-spot verifications and investigations and the exchange of information between competent authorities.

[^58]:    10 Introduced by the second final provision of Law 25/2011, of 1 August, on partial reform of the Capital Companies Act and incorporation of Directive 2007/36/EC, of the European Parliament and of the Council, of 11 July 2007, on the exercise of certain rights of shareholders in listed companies.

[^59]:    11 Sustainable Economy Act 2/2011, of 4 March.
    12 Law 3/2009, of 3 April, on structural modifications of commercial companies.

[^60]:    1 Available data: November 2011.

[^61]:    1 Available data: November 2011.
    2 Regulated by Section 36.7 of the Securities Market Law and Order ECO/764/2004.
    3 Transactions performed in accordance with Order dated 25 March 1991 on the margin system in spot transactions.

[^62]:    1 Available data: November 2011.
    2 Non-Profit Institutions Serving Households.

[^63]:    1 Available data: November 2011.
    2 Includes issuance and admission to trading files.
    3 Includes the following underlyings: baskets of securities, exchange rates, interest rates and commodities.

[^64]:    1 Olive Oil Futures Market (MFAO).
    2 Available data: November 2011.

[^65]:    1 Accumulated data for the period. Quarterly.

[^66]:    1 Data at end of period. Quarterly.
    2 Includes retail, professional and other clients.

[^67]:    1 Accumulated amounts from the start of the year up to the last day of each quarter. Includes companies removed over the year.

[^68]:    1 Accumulated amounts from the start of the year up to the last day of each quarter. Includes companies removed over the year
    2 Available data: October 2011.

[^69]:    1 Accumulated amounts from the start of the year up to the last day of each quarter. Includes companies removed over the year
    2 Available data: October 2011.

[^70]:    1 Provisional data for foreign CIS marketed in Spain.
    2 Available data: October 2011. These data are sent quarterly by Investment Companies and foreign CIS and so the months which do not coincide with the end of the quarter have no available data.
    3 The assets of mutual funds invested in other financial mutual funds of the same management company were around 6,044 million euros in September 2011.
    4 Does not include data of ETF.

[^71]:    a The references to "Mutual funds" throughout the chapter do not include hedge funds or funds of hedge funds.

[^72]:    1 Estimated data.
    2 The data for passive management and absolute return funds refers to the last three quarters of the year.

[^73]:    1 The data for passive management and absolute return funds refers to the last three quarters of the year.

[^74]:    1 Does not include the annual yield of passive management and absolute return funds as these categories entered into force with Circular $1 / 2009$ as from the second quarter of 2009.

[^75]:    1 As from the second quarter of 2009, 100\% of the assets of SICAV (investment companies) co-managed by CIS management companies and other different companies are considered as assets under management by CIS management companies.
    2 Available data: October 2011
    3 Data available for the third quarter of 2011: August 2011.

[^76]:    1 CIS which have sent reserved statements does not include funds in process of dissolution or liquidation.
    2 Available data: October 2011. In this case, the return is monthly.

