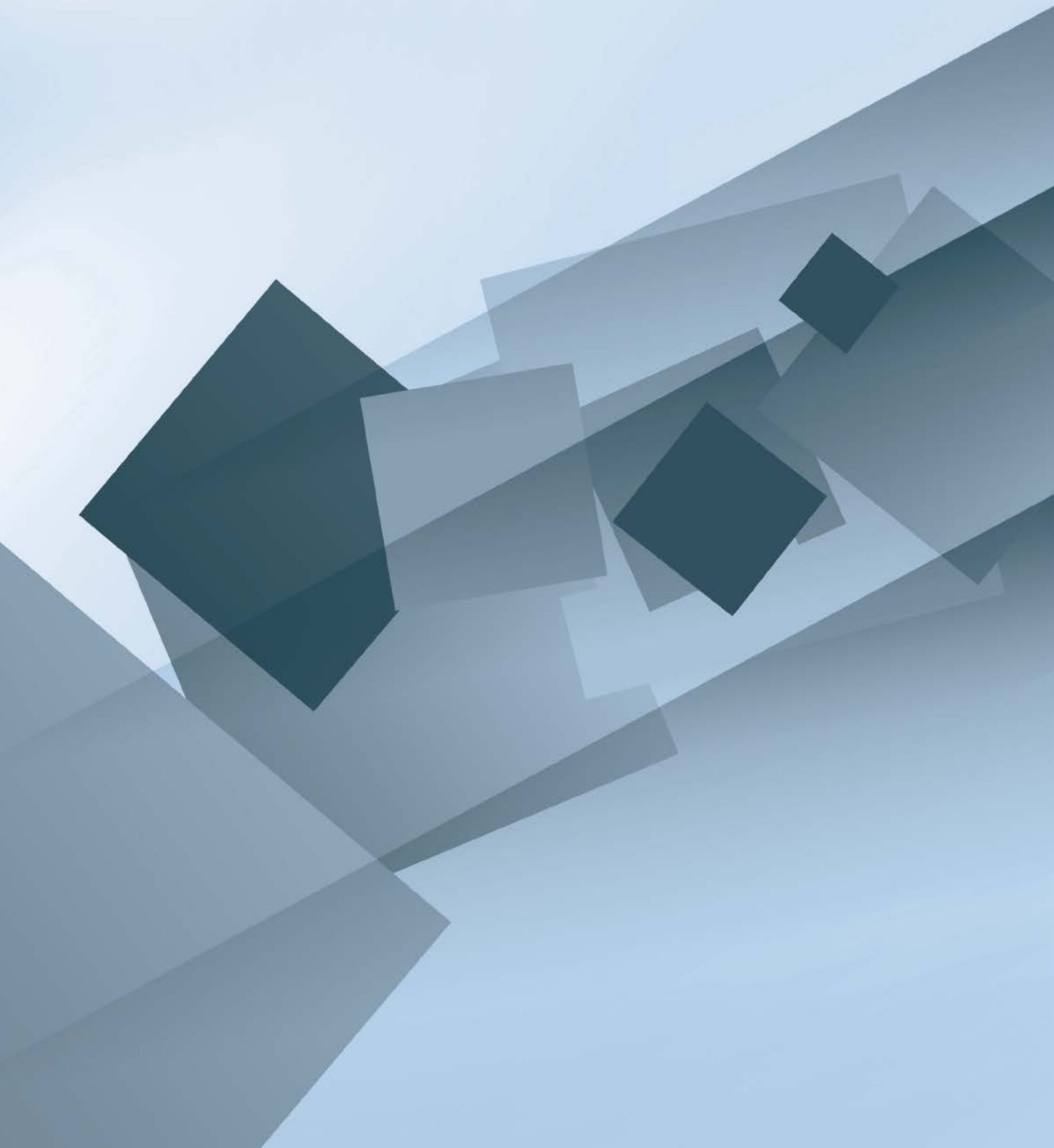




**CNMV BULLETIN**  
Quarter I  
2018





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## Abbreviations

AAPP	Public Administration Services
ABS	Asset-backed security
AIAF	<i>Asociación de Intermediarios de Activos Financieros</i> (Spanish market in fixed-income securities)
ANCV	<i>Agencia Nacional de Codificación de Valores</i> (Spain's national numbering agency)
ASCRI	<i>Asociación Española de Capital, Crecimiento e Inversión</i> (Spanish Capital, Growth and Investment Association)
AV	<i>Agencia de valores</i> (broker)
BME	<i>Bolsas y Mercados Españoles</i>
BTA	<i>Bono de titulización de activos</i> (asset-backed bond)
BTH	<i>Bono de titulización hipotecaria</i> (mortgage-backed bond)
CADE	<i>Central de Anotaciones de Deuda del Estado</i> (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	<i>Comité de Estabilidad Financiera</i> (Spanish government committee for financial stability)
CESR	Committee of European Securities Regulators
CMVM	<i>Comissão do Mercado de Valores Mobiliários</i> (Portugal's National Securities Market Commission)
CNMV	<i>Comisión Nacional del Mercado de Valores</i> (Spain's National Securities Market Commission)
CSD	Central Securities Depository
EAFI	<i>Empresa de Asesoramiento Financiero</i> (financial advisory firm)
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
ECLAC	Economic Commission for Latin America and the Caribbean
ECR	<i>Entidad de capital-riesgo</i> (venture capital firm)
EICC	<i>Entidad de inversión colectiva de tipo cerrado</i> (closed-ended collective investment entity)
EIOPA	European Insurance and Occupational Pensions Authority
EMU	Economic and Monetary Union (Eurozone)
ESFS	European System of Financial Supervisors
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
ETF	Exchange-traded fund
EU	European Union
EuSEF	European Social Entrepreneurship Fund
EuVECA	European Venture Capital Fund
FCR	<i>Fondo de Capital Riesgo</i> (venture capital fund)

FCR-pyme	<i>Fondo de Capital Riesgo pyme</i> (SME venture capital fund)
FI	<i>Fondo de inversión de carácter financiero</i> (mutual fund)
FICC	<i>Fondo de inversión colectiva de tipo cerrado</i> (closed-ended investment firm)
FII	<i>Fondo de Inversión Inmobiliaria</i> (real estate investment fund)
FIICIL	<i>Fondo de instituciones de inversión colectiva de inversión libre</i> (fund of hedge fund)
FIL	<i>Fondo de inversión libre</i> (hedge fund)
FOGAIN	<i>Fondo General de Garantía de Inversiones</i> (investment guarantee fund)
FROB	Fund for Orderly Bank Restructuring
FSB	Financial Stability Board
FTA	<i>Fondo de titulización de activos</i> (asset securitisation trust)
FTH	<i>Fondo de titulización hipotecaria</i> (mortgage securitisation trust)
IAASB	International Auditing and Assurance Standards Board
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
IIC	<i>Institución de inversión colectiva</i> (UCITS)
IICIL	<i>Institución de inversión colectiva de inversión libre</i> (hedge fund)
IIMV	<i>Instituto Iberoamericano del Mercado De Valores</i> (Ibero-American Securities Market Institute)
IOSCO	International Organization of Securities Commissions
ISIN	International Securities Identification Number
LATIBEX	Market in Latin American securities, based in Madrid
MAB	<i>Mercado Alternativo Bursátil</i> (alternative stock market)
MEFF	Spanish financial futures and options market
MIBEL	<i>Mercado Ibérico de Electricidad</i> (Iberian electricity market)
MiFID	Markets in Financial Instruments Directive
MiFIR	Markets in Financial Instruments Regulation
MMU	CNMV Market Monitoring Unit
MoU	Memorandum of Understanding
OECD	Organisation for Economic Co-operation and Development
OMIP	Operador de Mercado Ibérico de Energía (Operator of the Iberian energy derivatives market)
P/E	Price/earnings ratio
PRIIP	Packaged retail and insurance-based investment products
RENADE	<i>Registro Nacional de los Derechos de Emisión de Gases de Efectos Invernadero</i> (Spain's national register of greenhouse gas emission allowances)
ROE	Return on Equity
SAREB	Asset Management Company for Assets Arising from Bank Restructuring
SCLV	<i>Servicio de Compensación y Liquidación de Valores</i> (Spain's securities clearing and settlement system)
SCR	<i>Sociedad de capital-riesgo</i> (venture capital company)
SCR-pyme	<i>Sociedad de capital riesgo pyme</i> (SME venture capital company)
SENAF	<i>Sistema Electrónico de Negociación de Activos Financieros</i> (electronic trading platform in Spanish government bonds)
SEPBLAC	<i>Servicio Ejecutivo de la Comisión de Prevención del Blanqueo de Capitales e infracciones monetarias</i> (Bank of Spain unit to combat money laundering)
SGC	<i>Sociedad Gestora de Carteras</i> (portfolio management company)
SGECR	<i>Sociedad gestora de entidades de capital-riesgo</i> (venture capital firm management company)
SGFT	<i>Sociedad Gestora de Fondo de Titulización</i> (asset securitisation trust management company)



SGIIC	<i>Sociedad gestora de instituciones de inversión colectiva</i> (UCITS management company)
SIBE	<i>Sistema de Interconexión Bursátil Español</i> (Spain's electronic market in securities)
SICAV	<i>Sociedad de Inversión de Carácter Financiero</i> (open-end investment company)
SII	<i>Sociedad de Inversión Inmobiliaria</i> (real estate investment company)
SIL	<i>Sociedad de Inversión Libre</i> (hedge fund in the form of a company)
SIM	<i>Sociedad de Inversión Mobiliaria</i> (securities investment company)
SME	Small and medium-sized enterprise
SMN	<i>Sistema Multilateral de Negociación</i> (multilateral trading facility)
SON	<i>Sistema Organizado de Negociación</i> (organised trading facility)
SV	<i>Sociedad de Valores</i> (broker-dealer)
TER	Total expense ratio
TRLMV	<i>Texto refundido de la LMV (RDL 4/2015, de 23 de octubre)</i> (recast text of the Securities Market Act)
UCITS	Undertaking for Collective Investment in Tradable Securities



## **I Securities markets and their agents: Situation and outlook**



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# 1 Executive Summary

- The most recent macroeconomic environment has been marked by the accelerating growth in GDP in most advanced and emerging economies, which is also taking place with a high level of synchrony. The economic cycle is still at a more advanced stage in the US, where the Federal Reserve maintains the process of raising interest rates<sup>1</sup>, while the monetary policy stance in the euro area remains expansive although the ECB is reducing the volume of bond purchases in the market and is starting to show signs of a change in its strategy. In this context, it is likely that forces moving in opposite directions will condition the development of economic activity over the coming months. Factors such as the tax reform in the US might have a positive impact on activity in that economy, while growing tensions relating to a possible trade war would be harmful. In its latest forecasts, released in April, the IMF foresees a slight acceleration in global GDP growth this year, which it predicts will rise by almost 4%, but it highlights the presence of some risks.
- The most significant event in international financial markets in this period was the return of volatility to equity markets, which, influenced by the publication of certain data on the US labour market, an upward trend in energy prices and fears of a trade war, recorded, with few exceptions, falls. The falls in European indices ranged between 2% of the Euronext 100 and 8.2% of the UK's FTSE 100<sup>2</sup>. Japanese indices lost almost 6%, while US indices performed a little better and ranged between -2.5% of the Dow Jones and 2.3% of the NASDAQ. Despite the falls, market risk remains high in some companies.
- In international bond markets, short-term yields reflected the differences in monetary policies applied. Consequently, the US three-month yields rose by over 60 bp between January and March, while they remained virtually unchanged in the euro area. The yields on longer-term bonds rose in the first few weeks of the quarter and then fell; leaving cumulative balance to the end of March that varies depending on the country. Most noteworthy was the increase in the yield of the ten-year sovereign bond in the US (33 bp, up to 2.74%) and in the United Kingdom (16 bp, up to 1.35%) and the fall in several countries in the euro area, including Spain, Portugal and Italy, driven by the improvements in credit ratings published over recent months.

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1 The closing date for this report is 31 March except for the IMF's forecasts for GDP growth and the information of the Financial Accounts corresponding to the fourth quarter of 2017, both of which were published in April.

2 Only the Italian index recorded growth (2.6%).

- The Spanish macroeconomic environment was favourable in 2017 as GDP continued growing at a good rate (3.1%), inflation gradually declined after the initial highs and the public deficit also narrowed, to 3.1% of GDP, favoured not only by the buoyancy of the economy, but also by the significant savings in the debt interest expense. Economic expansion allowed the number of employed people to grow by approximately 500,000, which meant that the unemployment rate, although still high, ended 2017 at 16.55% of the active population, two percentage points down on 2016. Since then, the political instability in Catalonia has remained a source of uncertainty, but at least for now its impact on economic activity is not significant. In April, the IMF confirmed the positive situation of the Spanish economy, releasing a forecast for the year of 2.8%, 0.4 percentage points up on its January forecast.
- Banks continue to operate in a complex scenario of low interest rates that pressures downward on their profitability. However, the buoyant economy remains a favourable factor for the financial sector in Spain. In fact, the appearance of attractive investment projects and healthy private consumption are favouring a recovery in lending. However, the volume of non-performing assets remains high and, as in other European economies, a certain overcapacity is noted, as well as a range of latent challenges, some of which are related to the development of new technologies applied to finance.
- The Spanish financial markets stress index, which remained at very low levels in 2017, rose at times to highs of 0.27 (the threshold separating low and medium stress levels), mainly as a result of volatility hikes in equity markets. Some episodes arose as a result of certain sudden changes in expectations regarding monetary policy in the US and to the perception of restrictions to global trade. The highest stress levels were recorded in the equity, derivatives and exchange rate segments. Since then, the index fell to values of around 0.2 at the end of March.
- More specifically, in Spanish equity markets, the Ibex 35 closed the first quarter of the year with a fall of 4.4%, in line with the performance of other benchmark European indices and in a context of higher volatility. European stock markets were dragged along by US markets at times in which the positive surprises in US employment data led to a change in expectations about interest rate hikes by the Federal Reserve. At the end of the quarter, the uncertainties generated with regard to a possible trade war led to new price falls, which were concentrated in large-cap companies. In this context, the trading of Spanish securities rose in the first three months of the year by 5.4%, to 234 billion euros, with growth in trading recorded in foreign markets and MTFs (of 32%) and a fall in the home market (of -6.6%), whose market share fell to 61.4% (68.3% in 2017).
- In fixed-income markets, expectations relating to the change in the ECB's monetary policy, in a context of strong growth, led to rises in medium-term and long-term interest rates in several European economies. In Spain, in contrast, the improvement in the rating of the ten-year sovereign bond had a greater impact and led to a substantial fall in the risk premium in the first quarter of the year, which dropped from 114 bp to 67 bp at the end of March. A total



of 19.96 billion euros of gross fixed income issues were registered with the CNMV in the first quarter, 22% down on those registered in the same period of 2017. The volume of issues, which has remained at low levels, continues to be conditioned by financial institutions' lower financing requirements, competition from traditional bank financing - whose conditions have improved significantly - and maintenance of the international issuing activity of large companies (between January and February, fixed-income issues abroad amounted to almost 15 billion euros).

- Assets managed by mutual funds grew by over 11% in 2017 to 265 billion euros, mainly as a result of the high level of subscriptions by unit-holders, which in total exceeded 21 billion euros. Fund returns of 2.4% also had a positive effect on assets under management. It is worth noting that unit-holders are opting for higher-risk fund categories, such as global funds and equity funds in their search for higher returns in the current context of low interest rates. Against this backdrop, CIS management companies, which grew in number from 101 to 108, reversed the downward trend of recent years and recorded a 25.6% rise in their profit before tax to 755 million euros. The provisional data for January 2018 indicate that the sector's expansion continues as assets under management rose by 2.2% to over 270 billion euros.
- Broker-dealers and dealers operated in more favourable conditions in 2017 than in previous years, particular in the case of dealers. Even though these intermediaries only obtained 12% of the total revenue generated by investment services, in which credit institutions play a more prominent role, their profits grew by almost 10% in 2017. This increase is due to the gradual change in their business model, in which the traditional main source of income (order processing and execution) has been losing importance, while other business lines, such as CIS marketing, portfolio management and investment advisory services have taken on greater importance. The sector's solvency conditions remain satisfactory, although between 2016 and 2017 there was a fall in the surplus of regulatory capital over minimum requirements.
- The report includes two monographic exhibits:
  - The first describes the announcement of the ECB on publication of an unsecured overnight rate and creation of a working group on alternative benchmarks in the euro area.
  - The second lists the measures specified last year by the European Commission regarding its Action Plan on Building a Capital Markets Union in 2019.

## 2 Macro-financial background

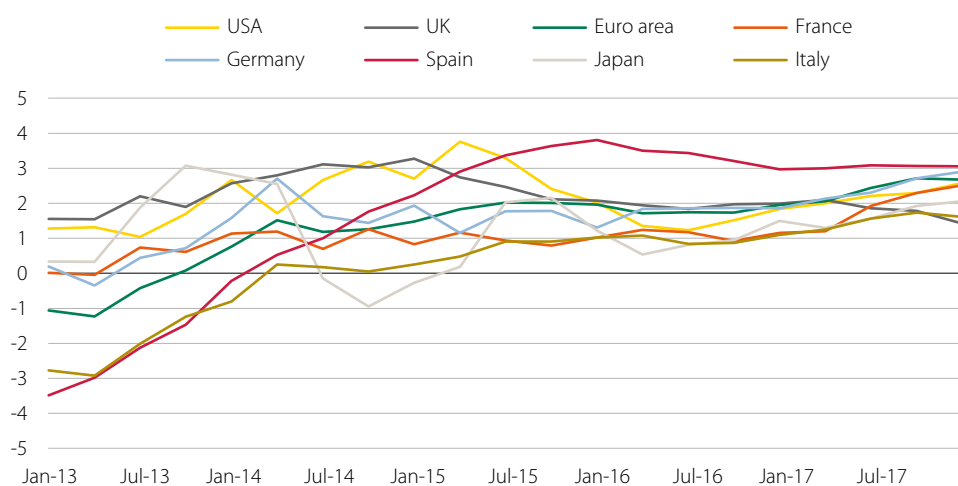
### 2.1 International economic and financial developments

*The global economy continued growing at a good rate and across the board in 2017, with global GDP rising by 3.8%.*

The global economy continued growing at a good rate across the board in the different countries in 2017, rising by 3.8%, over half a percentage point higher than the rate recorded in 2016. By region, US GDP grew by 2.3% over the year (1.5% in 2016), while growth in most euro area economies was greater than in 2016. Specifically, Germany and Spain recorded strong growth, with rates of 2.5% and 3.1%, respectively (1.9% and 3.3% in 2016). GDP growth in France accelerated significantly and reached 1.8% (1.2% in 2016), in contrast with the more moderate increase in Italy (1.5% compared with 0.9% in 2016). For its part, growth in the United Kingdom slowed to 1.8% (previously, 1.9%) due to the effect on inflation of the depreciation of the pound and, ultimately, on domestic demand. Lastly, Japan's GDP accelerated to 1.7%, 0.8% points above the figure recorded in the previous year.

Annual % change in GDP

FIGURE 1



Source: Thomson Datastream.

*In its last meeting, the Federal Reserve decided to raise its target range for the federal funds rate to 1.5%-1.75%...*

At its last meeting, held on 20 and 21 March, the Federal Reserve decided to raise its target range for the federal funds rate to 1.5%-1.75% due to the progress recorded in the job market and the improved outlook for growth in the economy. The Federal Reserve expects to carry out two or three more rate hikes this year, although the speed of these rises will depend on the how economic conditions and inflation evolve relative to the objectives of the institution.

*... while the ECB decided to maintain the official interest rate unchanged and confirmed that its asset purchase programme would continue until September.*

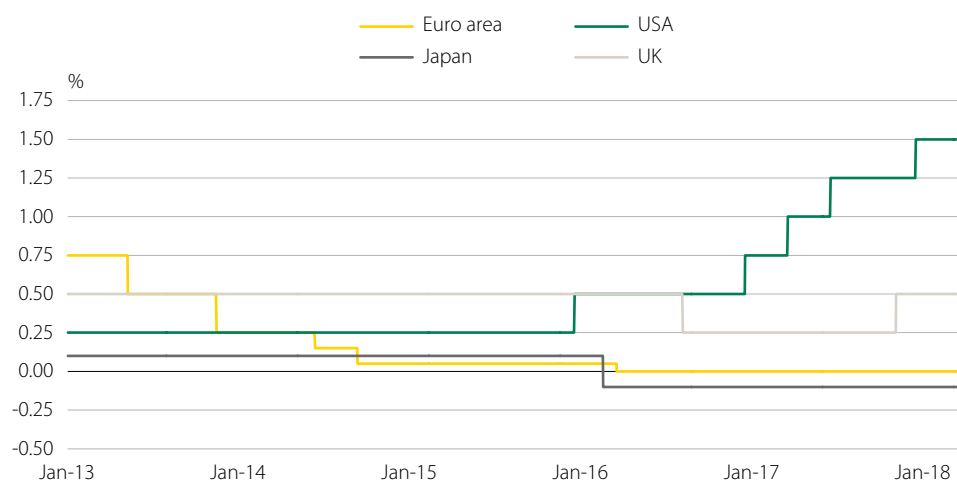
For its part, the European Central Bank (ECB) announced in March its decision to maintain the main refinancing rate, the deposit facility rate and the marginal lending rate at 0%, -0.4% and 0.25%, respectively, and its expectation that these rates will remain low over a long period. Similarly, the ECB confirmed that the volume of its monthly asset purchases will be 30 billion euros until the end of September or beyond if necessary. It also stated that its monetary policy stance should be accommodative as, even though the euro area is growing at a good rate across the board, inflation measures, including core inflation, remain at low levels and still need to converge to rates lower than, but close to, 2%.

Lastly, the Bank of England decided to maintain its bank rate at 0.5% and continue with the same amounts in its asset purchase programme. The inflation rate, which fell from 3% in January to 2.7% in February, is expected to continue falling gradually although it will remain at levels above 2% in the short term. Similarly, the Bank of Japan maintained both its official interest rate, which remains at -0.1%, and the amount of its asset purchase programme, with the aim of controlling the interest rate curve.

*For their part, both the Bank of England and the Bank of Japan decided not to make any changes to official rates or the amounts of their purchase programmes.*

## Central bank interest rates

FIGURE 2



Source: Thomson Datastream. Data to 31 March.

Short-term interest rates followed the trend recorded in 2017 during the first quarter of the year and continued to diverge between regions as a result of the different monetary policies applied. Thus, three-month rates in the US, which had risen by 70 bp in 2017, recorded an increase of 62 bp in the first quarter of 2018 to stand at 2.31% at the end of March, discounting two additional rate rises by the Federal Reserve. In contrast, short-term interest rates in the euro area, which had fallen slightly in 2017 for the three-month benchmark rate (-1 bp) and for the twelve-month benchmark rate (-10 bp), remained unchanged in the first three months of 2018, which reflects the expectation that the ECB will not raise official interest rates in the short term.

*Short-term interest rates continued diverging between regions in the first quarter of 2018, due to the different monetary policies applied.*

### Announcement of the ECB on publication of an unsecured overnight rate and creation of a working group on alternative benchmarks in the euro area

EXHIBIT 1

Benchmarks, whose regulation in the European Union has been applicable since 1 January 2018 – Regulation (EU) 2016/1011 – play an essential role in the economy and in the financial sector because they are widely used for setting prices in numerous financial instruments and contracts and at the same time they have a significant influence on the implementation and monitoring of the transmission of monetary policy.

In their current format, the reduction in transactions and volume in the underlying markets that they represent call into question their medium and long-term

sustainability. Therefore, in line with the FSB's recommendations, a transition is required towards improved benchmarks that are more representative of the economic reality that they aim to measure, as well as towards alternative benchmarks that reduce the excessive reliance on current benchmarks.

In this context, the European Central Bank has announced its intention to publish, prior to 2020, an unsecured overnight interest rate based totally on the actual transactions in euros that banks report daily to the ECB for the purpose of money market statistical reporting.

At the same time, the ECB, the European Commission, the European Securities and Markets Authority (ESMA) and the Belgian authority responsible for supervising the administrator of critical benchmarks in the euro area (FSMA, Financial Services and Markets Authority), have launched the creation of a working group to search for a risk-free rate to act as the basis for establishing an alternative to current benchmarks, basically Euribor and Eonia. The working group will be chaired by a private sector representative and with a secretariat provided by the ECB.

In order to fulfil its mission, three subgroups have been created that will report to the main group and whose lines of work will be as follows:

1. Identifying an alternative euro area risk-free rate consistent with IOSCO principles and Regulation (EU) 2016/1011 which may be used for new derivatives and other contracts, including mortgage contracts. With this aim, one or several subgroups will be set up, chaired by the private sector, which will analyse potential RFRs. Their conclusions and proposals will be announced at the end of 2018.
2. Study of robustness of contracts to a possible cessation of the benchmarks. This line of work will involve the participation of market representatives and end-users, as well as the International Swaps and Derivatives Association (ISDA), which will provide its experience in the ongoing work on derivatives. This work will be completed by 2019.
3. Development of an adoption plan for the new benchmarks and, if necessary, the creation of a transition plan for legacy contracts. Taking into account the existence of retail contracts and their implications from the perspective of consumer protection, ESMA will coordinate and act as secretary for a subgroup responsible for this line of work, which will also attempt to identify appropriate alternatives for the current term-structured benchmarks. This work will also be completed by the end of 2019.

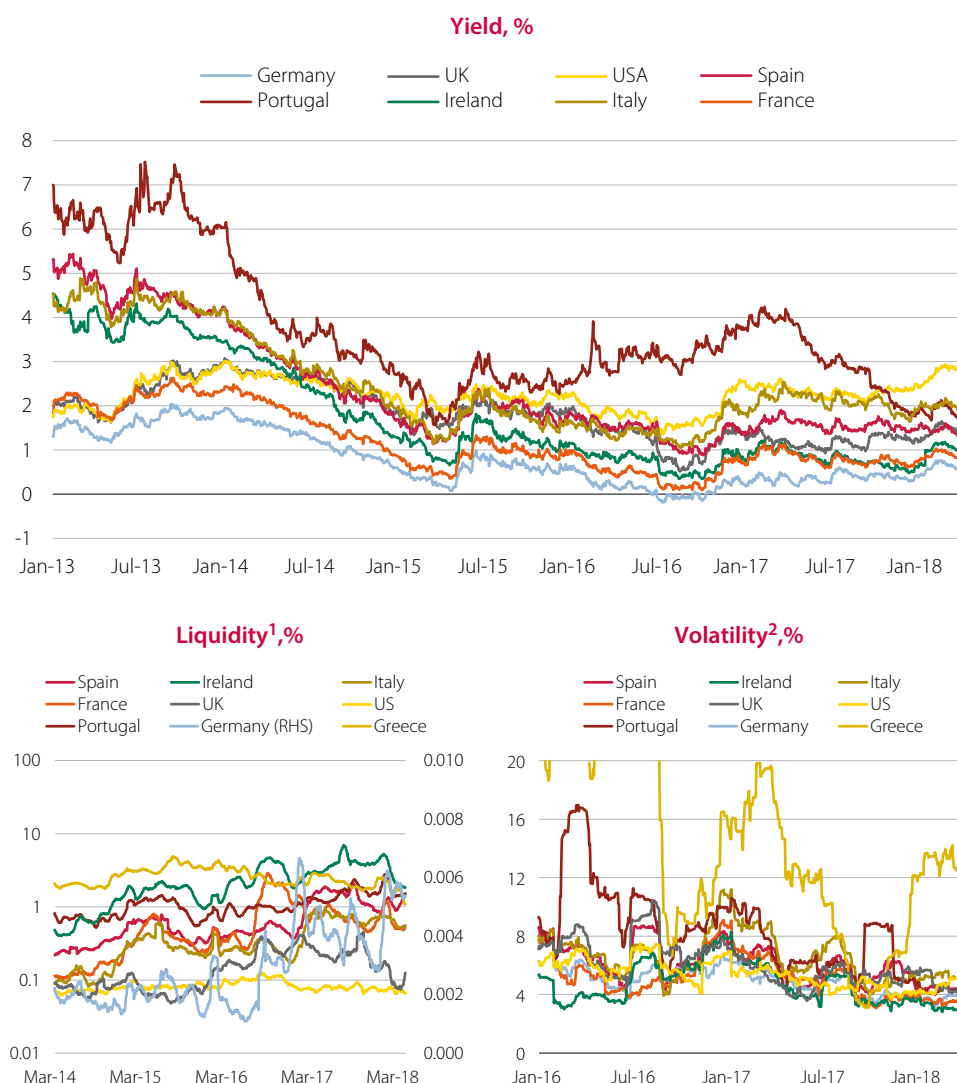
These initiatives follow the recommendations of the FSB and the same line taken by other jurisdictions, such as the United Kingdom, the United States, Switzerland and Japan. This will establish the foundations for progress and the use of alternative benchmarks to those currently used, which will make it possible to reduce excessive exposure to these benchmarks and design a potential orderly transition without any disturbance for markets and end users, as well as for the financing of the economy and financial stability.

Yields on long-term government bonds performed unevenly in 2017. While in the US, the yield on the ten-year sovereign bond remained unchanged, in the euro area, yields rose by around 20 bp in most countries, partly as a result of strong economic growth in the region and the expectation that monetary policy would start to normalise in the medium term. Portugal and Greece did not follow this trend and the yields on their sovereign bonds fell by 183 bp and 301 bp, respectively, given the significant improvement in the perception of credit risk, confirmed by the improvement in their credit rating in the former case and, in the latter case, the approval of the disbursement of an additional tranche of the financial support offered by the European Stability Mechanism (ESM).

*In 2017, yields on long-term government bonds remained unchanged in the US, while they rose in some euro area countries slightly, and in others fell significantly as a result of the improvement in the perception of their credit risk.*

### Ten-year sovereign bond market indicators

FIGURE 3



Sources: Bloomberg, Thomson Datastream and CNMV. Data to 31 March.

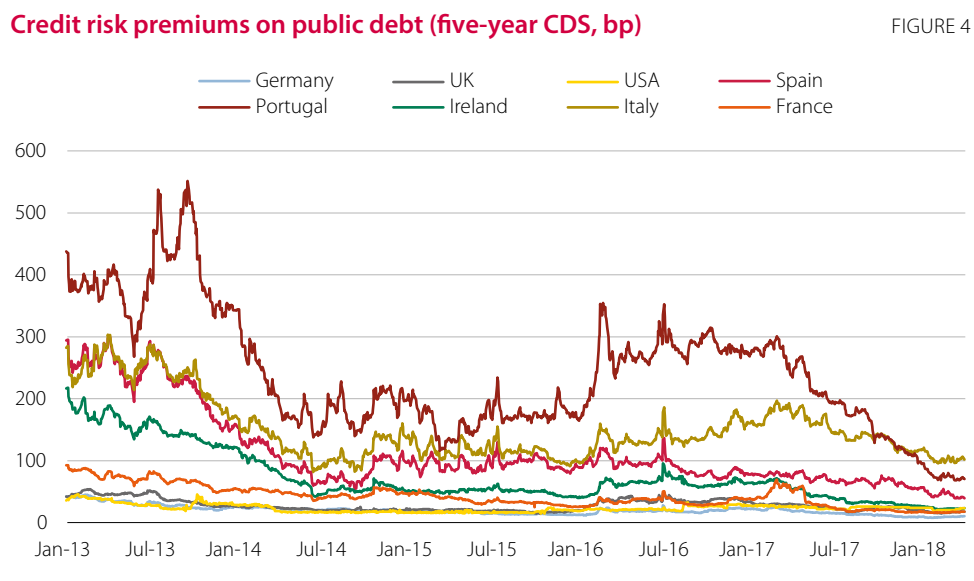
- 1 One-month average of daily bid-ask spread for yields on ten-year sovereign bonds (logarithmic scale). In the case of the German bond, the one-month average of the bid-ask spread is represented without dividing by the yield average to avoid the distortion introduced by its proximity to zero.
- 2 Annualised standard deviation of daily changes in 40-day sovereign bond prices.

*In the first quarter of 2018, sovereign bond yields rose across the board until the middle of February and then fell, leaving an uneven balance between countries.*

In the first quarter of 2018, until mid-February, sovereign bond yields rose in most advanced economies, buoyed by the improved macroeconomic outlook, and subsequently fell leaving an uneven balance between countries at the end of March. No significant increase in the quarter was recorded in the US, where the ten-year bond yield rose by 33 bp to 2.74% as a result of the expected effects of the tax reform approved at the end of December, which is likely to have an upward impact on inflation. The performance of yields in the euro area was more uneven: yields rose in some countries as a result of the possibility of a normalisation of monetary policy in the medium term, while in others the downward impact of the improvement in their rating was more significant. Specifically, yields rose by 7 bp in Germany and 11 bp in Holland, to 49 bp and 64 bp, respectively. In contrast, falls were recorded in the yields of Portugal (-32 bp to 1.61%) and Spain (-40 bp to 1.16%), as a result of the aforementioned improvements in their credit ratings.

*Sovereign risk premiums show little variation, as, even though the economy performed positively, they start from very low levels.*

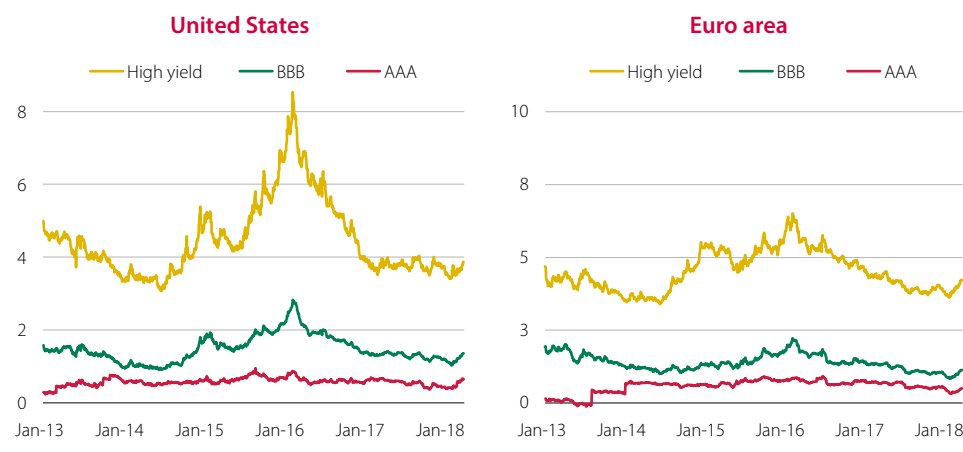
The sovereign credit risk premiums of most advanced economies (assessed through the five-year CDS of public debt instruments) are at very low levels. Therefore, despite the positive performance of the economy, they underwent few changes in the first quarter of the year. There were only significant falls in Greece (-45 bp, to 336 bp), Portugal (-24 bp, to 70 bp), Italy (-16 bp, to 101 bp) and Spain (-18 bp, to 39 bp), as a consequence of the improvements in their ratings in the last six months.



Source: Thomson Datastream. Data to 31 March.

*Corporate bond spreads in the US rose in all bond segments, while in the euro area, only high-yield bond spreads increased.*

Corporate bond spreads in the US rose in all bond segments, though more sharply in those with a better credit rating. AAA grade spreads rose by 23 bp to 65 bp; BBB spreads by 16 bp to 136 bp; and high-yield spreads rose by 14 bp to 388 bp. In the euro area, where bond spreads fell across the board in 2017, the credit spread rose by 31 bp in the high-yield segment to 422 bp, while the other bonds recorded much greater stability. At the end of March, AAA and BBB bond spreads stood at 50 bp and 113 bp, respectively.

Spread vs. the ten-year government bond, percentage points<sup>1</sup>

Sources: Thomson Datastream and CNMV. Data to 31 March.

<sup>1</sup> In the euro area versus German public debt.

Net long-term issuance in global bond markets in the first three months of 2018 (semi-annualised data) fell significantly compared with the first half of 2017 and stood at 832 billion dollars (37% down on the same period of the previous year). This fall was mainly the result of a reduction in net sovereign issues, which are in negative territory. Net private sector issues, however, rose by 36% despite the 23% fall recorded in the non-financial sector.

The reduction in the amount of net sovereign issues stood at -134 billion dollars. Although in Europe there was an increase of 69 billion dollars, up to a net volume of 278 billion dollars, the US and Japan recorded substantial falls, which in both countries led to net issuance being negative. In the former, net issuance stood at -211 billion dollars (50 billion dollars in the first half of 2017), while in the latter it fell to -469 billion dollars (112 billion in the first half of 2017). The falls in gross issuance explain to a great extent the falls recorded in net issuance, although in both regions the volume of maturities has increased. However, net issuance in the US is expected to increase this year as a result of the tax reform approved in December. In contrast, the reduction in issuance in Japan is the result of lower financing needs in a context in which the economic recovery is increasing tax income.

*Global debt issuance in the first quarter of 2018 fell compared with the same period of 2017, mainly as a result of the reduction in net sovereign issuance.*

*In particular, the reduction in net sovereign issuance amounted to -134 billion dollars. By region, Europe recorded an increase, while the US and Japan recorded significant falls...*

## Net international debt issues

FIGURE 6



Source: Dealogic. Half-yearly data. Data for the second half of 2017 are up to 31 March, but their half-yearly equivalent is shown for comparative purposes.

... while net financial sector issues rose considerably, mainly as a result of the increase recorded in Europe, although issuance also grew in the US and Japan.

Total net financial sector issuance rose in the first half of 2018 to 585 billion dollars (compared with 220 million dollars issued in the same period of 2017). This increase is mainly the result of the net volume issued in Europe, which in the first half of 2017 had been negative and which rose by 274 billion to 212 billion in the first half of 2018 in a context of strong growth and an improved outlook for the European banking sector. For its part, issuance in the US rose to 196 billion dollars (compared with 162 million in the same period of the previous year) and in Japan rose by 14 billion to 21 billion dollars, as a result of the fall in maturities.

Finally, non-financial sector issuance fell across the board, except in Europe, although a large part of the falls may be attributed to the increase in maturities.

Finally, non-financial sector issuance fell by 111 billion dollars to 381 billion dollars. This fall was recorded across the board with the exception of Europe, although a large part of the falls may be attributed to the increase in maturities. Accordingly, gross issuance rose by 10 million dollars. By geographic area, the largest fall in net issuance was recorded in the US, where the amount stood at 171 billion (278 billion in the same period of the previous year). Meanwhile, issues in Europe rose by six billion dollars to 104 billion.



The leading equity indices, which in 2017 recorded substantial gains across the board, mostly recorded falls in the first three months of 2018. These falls took place despite the favourable global macroeconomic conditions partly as a result of the fears that normalisation of US monetary policy will take place faster than expected and the concern that protectionist policies might trigger a trade war.

*The leading equity indices, which in 2017 had recorded substantial gains across the board, recorded falls in the first three months of 2018.*

By region, US stock indices chalked up the most favourable relative performance, with slight falls in the Dow Jones (-2.5%) and in the S&P 500 (-1.2%), and a 2.3% gain in the NASDAQ Technology Sector Index. This performance is linked to the expectations that the tax reform approved in December will stimulate economic growth over the short and medium term. For their part, European stock markets recorded falls that range between -2% of the Euronext 100 and -8.2% of the British FTSE 100, which reflects the concerns about the progress of the Brexit negotiations. Italy's MIB 30 index is the exception to these generalised falls, with a gain of 2.6%.

*By region, US stock indices chalked up the most favourable relative performance, while European stock markets recorded falls of between -2% and -8.2%.*

Coinciding with the falls in the main stock market indices in the first half of February, the measures of global implied volatility reached their highest levels in two years, exceeding 35% in US markets and 25% in most other markets (see the right-hand panel of figure 7). In subsequent weeks, implied volatility levels fell once again and ended March at below 20%.

*Coinciding with the falls in the main stock market indices in the first half of February, the measures of global implied volatility reached their highest levels in two years.*

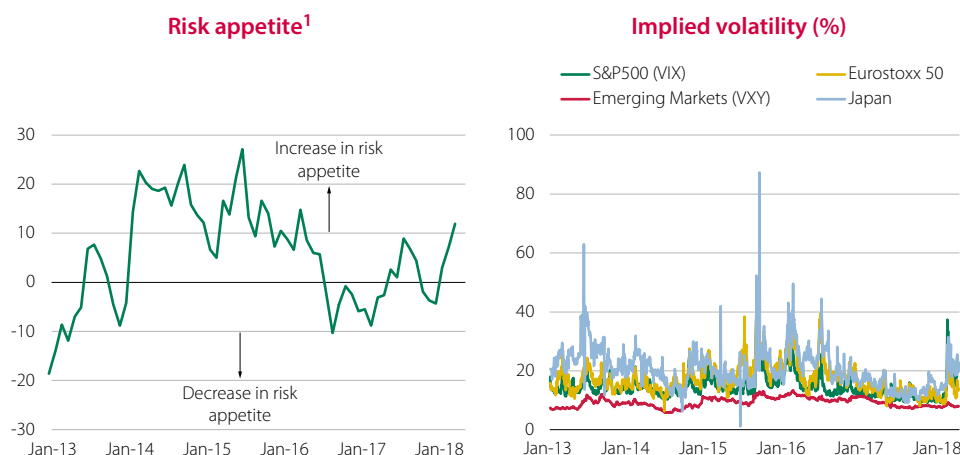
Emerging stock markets performed unevenly in the first half of 2018. The Argentine Merval index and the Brazilian Bovespa gained 3.5% and 11.7%, respectively, while the Mexican stock market fell by 6.5%. For its part, the Chinese Shanghai Composite index fell by 4.2%, which reflects the concerns relating to the protectionist measures imposed by the US administration, while the Russian RTS index gained 8.2%, buoyed by the improvement in the rating of sovereign Russian debt and the increase in the price of oil.

*For their part, emerging stock markets performed unevenly in the first quarter of 2018.*

## Performance of main stock indices<sup>1</sup>

TABLE 1

%	2014	2015	2016	2017	II17	III17	IV17	I18
<b>World</b>								
MSCI World	2.9	-2.7	5.3	20.1	3.4	4.4	5.1	-1.7
<b>Euro area</b>								
Eurostoxx 50	1.2	3.8	0.7	w6.5	-1.7	4.4	-2.5	-4.1
Euronext 100	3.6	8.0	3.0	10.6	0.0	5.1	-0.4	-2.0
Dax 30	2.7	9.6	6.9	12.5	0.1	4.1	0.7	-6.4
Cac 40	-0.5	8.5	4.9	9.3	0.0	4.1	-0.3	-2.7
Mib 30	0.2	12.7	-10.2	13.6	0.4	10.3	-3.7	2.6
Ibex 35	3.7	-7.2	-2.0	7.4	-0.2	-0.6	-3.3	-4.4
<b>United Kingdom</b>								
FTSE 100	-2.7	-4.9	14.4	7.6	-0.1	0.8	4.3	-8.2
<b>United States</b>								
Dow Jones	7.5	-2.2	13.4	25.1	3.3	4.9	10.3	-2.5
S&P 500	11.4	-0.7	9.5	19.4	2.6	4.0	6.1	-1.2
Nasdaq-Composite	13.4	5.7	7.5	28.2	3.9	5.8	6.3	2.3
<b>Japan</b>								
Nikkei 225	7.1	9.1	0.4	19.1	5.9	1.6	11.8	-5.8
Topix	8.1	9.9	-1.9	19.7	6.6	3.9	8.5	-5.6



Sources: Thomson Datastream and CNMV.

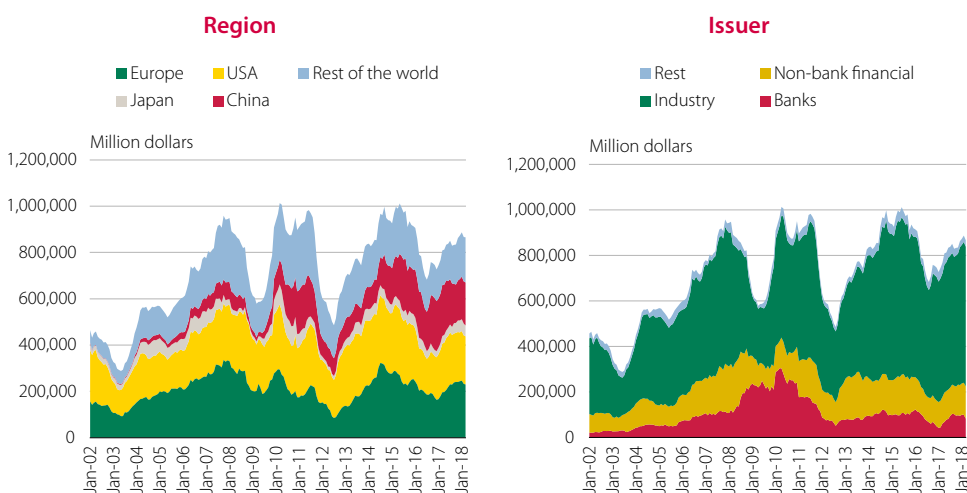
1 State Street indicator.

Equity issuance in the first quarter of 2018 was 3.4% down on the same period of 2017, with falls in the banking and financial sector and increases in utilities and industrial companies.

Equity issuance in the first quarter of 2018 was 3.4% down on the same period of the previous year and stood at 213 billion dollars. Falls were recorded in all the regions studied with the exception of China, where equity issuance amounted to 56 billion dollars, 39.3% up on the first quarter of 2017. The largest reductions were recorded in Europe and Japan (-23.2% and -38.2%, respectively), where stock market indices recorded worse performance, while the reduction in the US was 4.9%. The breakdown by sector reveals that the reductions were concentrated in the banking sector (-75.6%) and the non-banking financial sector (-7.2%), while utilities and industrial companies issued, respectively, 10.2% and 12.9% more than in the same period of 2017 (see figure 8).

Global equity issuance

FIGURE 8



Source: Dealogic. Cumulative twelve-month data to 31 March. For comparative purposes, the figure for this month is restated on a monthly basis.

## 2.2 National economic and financial developments

Spain's GDP grew by 3.1% in 2017, only 0.2 percentage points lower than the rate recorded in 2016, thus extending the expansion that began in 2014. The growth in the Spanish economy was greater than in the euro area (2.3%), but this difference fell compared with 2016 (from 1.5 pp to 0.8 pp) due to the strong recovery in European economies last year.

*Spain's GDP grew by 3.1% in 2017, 0.6 percentage points more than the euro area.*

The contribution of domestic demand to GDP growth rose progressively over 2017, increasing from 2.5 percentage points in 2016 to 2.8 points in 2017. In contrast, the contribution of the external sector to growth fell over the year, ending the last quarter in negative territory (annual average of 0.3 pp compared with 0.7 pp in 2016). The components of domestic demand showed that public consumption picked up speed between 2016 and 2017 (rising from 0.8% to 1.6%), as did gross fixed capital formation (from 3.3% to 5%), while private consumption slipped by 0.5 percentage points to 2.4%. With regard to the external sector, exports grew at a higher average annual rate than in 2016 (5% in 2017 compared with 4.8% in 2016), but the higher growth in imports (from 2.7% to 4.7%) meant that the contribution of the external sector to growth fell progressively to slightly negative figures.

*The contribution of domestic demand to growth rose from 2.5 pp in 2016 to 2.8 pp in 2017, while the contribution of the external sector fell (from 0.7 pp to 0.3 pp).*

**Spain: Main macroeconomic variables (annual % change)**

TABLE 2

	2014	2015	2016	2017	EC <sup>1</sup>	
					2018	2019
<b>GDP</b>	1.4	3.4	3.3	3.1	2.6	2.1
Private consumption	1.5	3.0	2.9	2.4	2.2	1.6
Government consumption	-0.3	2.1	0.8	1.6	0.8	0.8
Gross fixed capital formation, of which:	4.7	6.5	3.3	5.0	4.0	3.7
Construction	4.2	3.8	2.4	4.6	n.d.	n.d.
Capital goods and other	6.0	11.5	5.1	6.2	4.5	4.1
Exports	4.3	4.2	4.8	5.0	4.8	4.5
Imports	6.6	5.9	2.7	4.7	4.3	4.0
Net exports (growth contribution, pp)	-0.5	-0.4	0.7	0.3	0.3	0.3
<b>Employment<sup>2</sup></b>	1.0	3.2	3.0	2.8	2.1	1.6
<b>Unemployment rate</b>	24.4	22.1	19.6	17.2	15.6	14.3
<b>Consumer price index<sup>3</sup></b>	-0.1	-0.5	-0.2	2.0	1.6	1.5
<b>Current account balance (% GDP)</b>	1.1	1.1	1.9	1.9	1.9	1.9
<b>General government balance (% GDP)<sup>4</sup></b>	-6.0	-5.3	-4.5	-3.1	-2.4	-1.7
<b>Public debt (% GDP)</b>	100.4	99.4	99.0	98.3	96.9	95.5
<b>Net international investment position (% GDP)</b>	-90.5	-79.1	-68.7	-63.4	n.a.	n.a.

Sources: Thomson Datastream, European Commission, Banco de España and Spanish National Statistics Office (INE).

1 European Commission forecasts from the autumn of 2017, except for 2018 GDP and inflation, which were subsequently revised upwards (0.1 and 0.2 percentage points, respectively, compared with the previous forecast).

2 In full-time equivalent jobs.

3 European Commission forecasts refer to the harmonised index of consumer prices.

4 Data for 2014, 2015, 2016 and 2017 include government aid to credit institutions amounting to 0.1%, 0.1%, 0.2% and 0.04% of GDP, respectively.

n.a.: [data] not available.

*From the supply side, growth in value added accelerated in the construction sector and, to a lesser extent, in the industrial sector.*

*Following almost one year of sharp falls, the inflation rate rose slightly in the first three months of 2018 to 1.2% in March. The gap compared with the euro area fell to values very close to zero.*

*Positive job creation data in 2017 (2.8%) helped to reduce the unemployment rate, which remains high.*

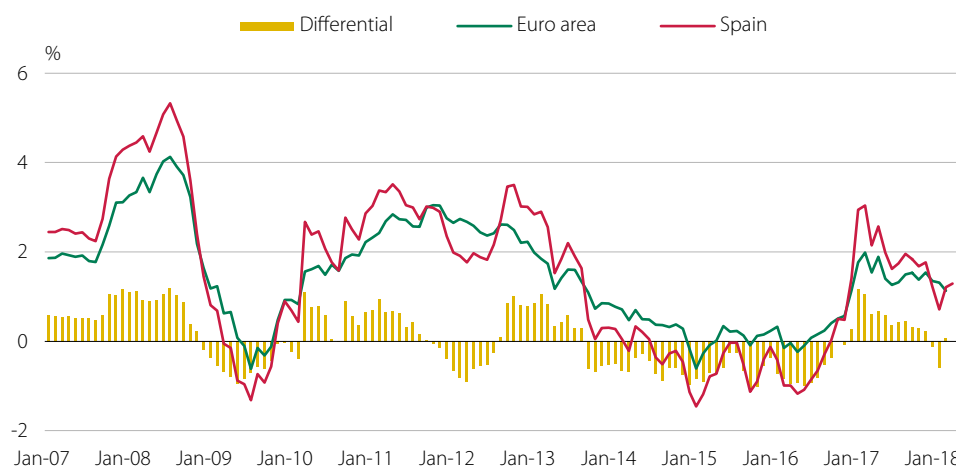
On the supply side of the economy, growth was recorded in the construction sector, whose value added grew by 4.9% in 2017, far above the growth in 2016 (1.9%) and, to a lesser extent, in the industrial sector, which recorded a slight acceleration (from 3.6% to 3.7%). In contrast, the services sector and the primary sectors recorded slower growth in 2017. In the case of services, value added rose by 2.6% (3% in 2016) and in the primary sectors, it rose by 3.7% (6.9% in 2016).

Inflation, which had fallen notably in 2017 as a result of energy inflation returning to normal<sup>3</sup>, hit a low in January 2018 of 0.6%, to subsequently rise slightly to 1.2% in March. Core inflation, which excludes the more volatile elements in the index, such as energy and fresh food, fluctuated around 1% in 2017 and ended the year at 0.8%. In February, it recorded a small rise to 1.1%. The inflation gap versus the euro area, which began 2017 at over one percentage point fell significantly to temporarily hit negative territory at the end of the year. In February 2018, this gap stood at 0.1 pp.

In the job market, the buoyancy of the economy allowed employment to grow by 2.8% in 2017, only a few decimal percentage points below the growth recorded in the last two years (3.2% in 2015 and 3% in 2016). Information from the Labour Force Survey (EPA) indicates that last year the number of employed people rose by 490,000 (1.86 million over the last four years) and that the unemployment rate fell to 16.55% in the fourth quarter (18.6% at the end of 2016). Furthermore, year-on-year growth in unit labour costs remained negative in 2017, although a little less than in 2016, as the increase in apparent productivity (0.27% on average in the year) outstripped the growth in remuneration per employee (0.15%).

**Harmonised ICP: Spain vs. euro area (annual % change)**

FIGURE 9



Source: Thomson Datastream. Data to March for Spain and February for the euro area.

<sup>3</sup> Energy price inflation fell from 17.5% in January 2017 to 2.6% in December and 1.4% in February 2018.

Public sector finances improved significantly in 2017 as a result of the recovery in the economy as well as the sharp fall in spending on debt interest. These factors allowed the public deficit to end the year at 3.11% of GDP<sup>4</sup>, 1.22 percentage points lower than in 2016, in line with the target set by the Government. All levels of government that require financing reduced the amount borrowed. Particularly noteworthy was the fall in the deficit of the central government, which dropped from 2.6% in 2016 to 1.9% in 2017 and recorded a primary surplus for the first time in ten years, and that of the autonomous regions, which stood at 0.32% (0.84% in 2016). The deficit of the Social Security Funds also fell, although to a lesser extent, dropping from 1.59% to 1.48%. The surplus of the Local Authorities remained practically unchanged in 2017 at close to 0.6% of GDP. Government debt stood at 98.08% of GDP at the end of the year, recording very few changes since the middle of 2014.

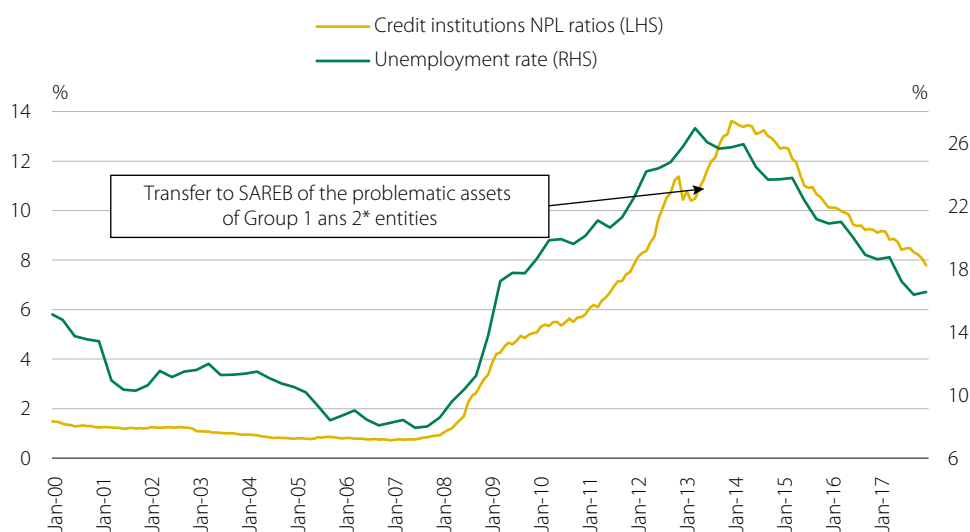
*Dynamic growth together with the fall in interest costs allowed the government deficit to fall to 3.1% of GDP in 2017, in line with the government's target.*

Banks continue to operate in a complex context dominated by the low level of interest rates, which placed downward pressure on their profitability. The buoyancy of the economy remains a favourable factor for the financial sector in Spain. In fact, the appearance of attractive investment projects and strong private consumption are favouring a recovery in lending. However, the volume of non-performing assets remains high<sup>5</sup> and, as in other European economies, a certain overcapacity is noted, as well as a range of latent challenges, some of which are related to the development of new technologies applied to finance (fintech).

*Low interest rates continue to apply downward pressure on bank profits, but a budding upturn in lending is noted in some segments.*

### Credit institution NPL ratios and the unemployment rate<sup>1</sup>

FIGURE 10



Sources: Banco de España and National Statistics Office (INE). Data to December.

<sup>1</sup> Percentage of active population.

\* Group 1 transfers took place in December 2012 (36.7 billion euros) and Group 2 transfers in February 2013 (14.09 billion euros).

<sup>4</sup> The government deficit figure stood at 3.07% of GDP if the amount of the support given to credit institutions is excluded.

<sup>5</sup> The NPL ratio stood at 7.8% of total lending in December 2017 (9.1% in 2016).

*The sector's aggregate income statement was significantly affected in 2017 by the losses of Banco Popular.*

Bank income statements showed a combined loss of close to 4 billion euros in 2017 (compared with a profit of 6 billion euros in 2016), as a result of the losses of the Banco Popular, which stood at over 13.5 billion euros<sup>6</sup>. Excluding the losses of this bank, the sector's aggregate profit in 2017 stood at over 9.6 billion euros. In addition, bank profits are still restricted by the context of low interest rates (the net interest margin stood at 23.23 billion euros in 2017, compared with 24.3 billion euros in 2016) and by the volume of non-performing assets, which is falling but remains high.

*In 2017, bank lending to companies grew slightly, while lending to households fell, although much less than in previous years.*

Bank lending to the non-financial resident sector (households and companies) rose slightly in 2017 in the case of companies (0.4%) and fell in the case of households (-0.8%), although the fall in the latter was not as sharp as in previous years (-1.3% in 2016, -2.1% in 2015 and -3.6% in 2014). In the case of non-financial companies, although lending recorded positive annual growth rates throughout last year, the rate turned negative once again in February of this year (-0.5%). However, lending indicators picked up in some segments. The moderation in the fall in lending to households was related both to the smaller fall in home purchase loans (-2.7% in February 2018, -2.8% in 2017 and -3% in 2016) and to the intensification of consumer lending (7.8% in February 2018, 6.4% in 2017 and 4.2% in 2016). In the euro area, lending to companies climbed by 1.9% in December (2.2% in January 2018), while lending to households rose by 3.3% (3.2% in January 2018).

*The size of the banking sector remained stable in 2017, thus breaking with the downward trend that began in 2013.*

The size of the banking sector remained stable in 2017, at 2.65 trillion euros, thus breaking with the downward trend that had begun in 2013. Some of the most important sources of funding, such as debt or borrowing from the Eurosystem<sup>7</sup>, grew, while others, such as deposits from resident households and companies recorded falls. Bank book value of equity remained stable at around 360 billion euros.

*Aggregate profit of non-financial listed companies exceeded 30 billion euros in 2017, more than double the figure recorded in 2016, in line with the buoyancy of the economy.*

Non-financial listed companies obtained an aggregate profit of 31.54 billion euros in 2017, more than double the figure recorded in 2016. With the exception of the industrial sector, every sector recorded growth in its profits, in line with the buoyancy of the domestic economy. Growth in profits was particularly strong in retail and services companies, rising from 63 million euros in 2016 to 14.63 billion euros in 2017<sup>8</sup>. Energy companies recorded a 10.5% increase in their profit to 9.76 billion euros, while construction and real estate companies recorded an even larger increase of 54%, to 5.27 billion euros. In general terms, industrial companies performed positively, but the contraction in the profits of some companies<sup>9</sup> led to the sector's aggregate profits falling from 2.34 billion euros in 2016 to 1.92 billion euros in 2017 (see table 3).

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6 The SRB (Single Resolution Board) adopted the decision for its resolution in June.

7 Borrowing from the Eurosystem (deducting the amount of the debt purchase programmes) at the end of 2017 amounted to 164 billion euros (139 billion in 2016).

8 The increased profits of Abengoa and, to a lesser extent, Codere explain the bulk of the change in aggregate profits. Excluding the results of these two companies, aggregate profits in the retail and services sector rose from 8.84 billion euros in 2016 to 10.32 billion euros in 2017.

9 For example, Siemens, Duro Felguera and Almirall.

## Profit by sector: Non-financial listed companies

TABLE 3

Million euros	Operating profit		Profit before tax		(Consolidated) profit for the year	
	2016	2017	2016	2017	2016	2017
Energy	13,101	11,621	10,735	10,344	8,828	9,759
Industry	3,807	3,273	3,173	2,474	2,336	1,920
Retail and services	12,907	17,331	6,762	19,050	63	14,625
Construction and real estate	4,907	6,339	3,240	5,353	3,417	5,267
Adjustments	37	44	32	40	26	33
<b>Aggregate total</b>	<b>34,685</b>	<b>38,520</b>	<b>23,878</b>	<b>37,181</b>	<b>14,618</b>	<b>31,538</b>

Source: CNMV.

The aggregate debt of non-financial listed companies, at 252.61 billion euros, was barely 0.2% lower than the previous year. However, its composition changed significantly as the level of short-term debts fell by 12.6% to around 46 billion euros, while long-term debts grew by 3% to over 206 billion euros. The changes in debt were not even across sectors: while there was a rise in debt levels among energy companies (from 5.16 billion euros to 81.51 billion euros) and industrial companies (from 3.78 billion euros to close on 21 billion euros), companies in the retail and services sector and in the construction and real estate sector, which are on average the most leveraged companies, continued to reduce their debt levels (by 7.6% and 2.3%, respectively). As a consequence of these movements, the aggregate leverage ratio of non-financial listed companies, measured as the debt to equity ratio, fell slightly from 1.15 to 1.07. The leverage of energy companies rose slightly, while that of retail and services companies and, above all, construction and real estate companies, fell moderately. The debt coverage ratio, measured using the ratio of debt to operating profit, improved significantly (falling from 7.3 to 6.6) as the increase in profit was much sharper than the rise in debt.

*Debt levels remained broadly similar in 2017, although the composition shifted in favour of long-term debt (3%) to the detriment of short-term debt (-12.6%).*

The latest data on the financial position of households reveal that both their savings rates and their debt-to-income and debt burden ratios continued to fall in 2017. The fall in the savings rate, which dropped from 7.7% of gross disposable income (GDI) at the end of 2016 to 5.7% in December 2017, is a result of buoyant aggregate consumption in a context of stagnated remuneration per employee. The debt-to-income ratio fell from 102.4% of GDI at year-end 2016 to 99.4% in 2017 as a result of both a reduction in the level of debt and an increase in the level of disposable income. The debt burden ratio fell slightly (from 11.7% of GDI to 11.6%) given the stability of the average cost of debt in the context of growing income<sup>10</sup>. Net household wealth rose in 2017 (from 529.5% of GDP to 541.6%) due to the increase in the value of real estate assets. Financial wealth remained relatively stable over the year.

*The financial position of households (debt and wealth) continues to improve although the savings rate fell sharply to stand at 6% of disposable income in the first quarter of 2017.*

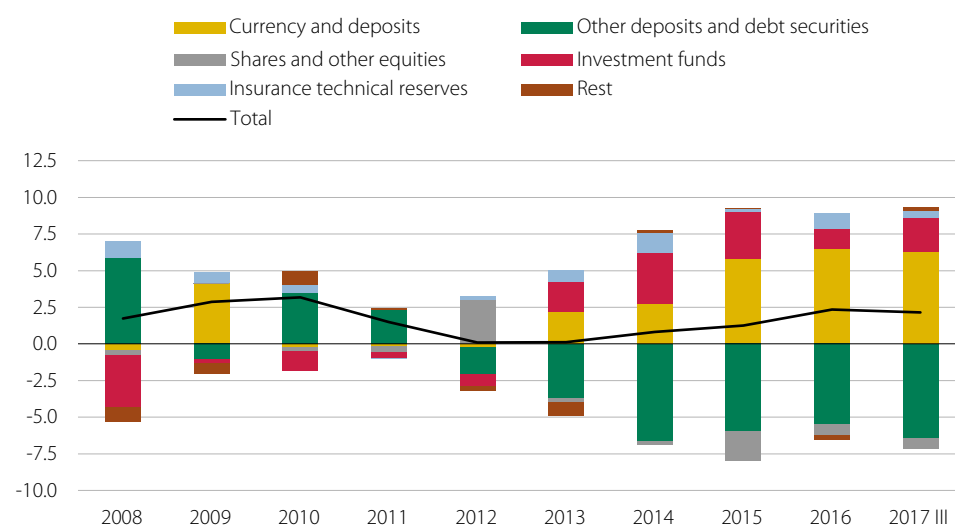
10 The fact that income grew and remuneration per employee rose slightly is down to the fact that the former is calculated as the sum of the income of all employees, the number of which has grown significantly over recent years, while the latter corresponds to the changes in the remuneration per employee.

Investors are still showing a preference for more liquid assets and mutual funds, and within these, the higher-risk categories.

Households' net financial investments rose to 2.6% of GDP in 2017 (2.5% in 2016) while the major trends in place since 2013 continued: investors are reducing their investments in term deposits and bonds (5.7% of GDP) as a result of low returns, and they are investing in more liquid assets (5.3% of GDP) and in investment funds (2.6% of GDP). In the case of mutual funds, it is important to indicate that investors are showing a clear preference for higher-risk categories; in fact, figures for year-end 2017 show that the most conservative categories recorded net redemptions of over 7.2 billion euros, while higher-risk categories received a significant inflow of investment (over 30 billion euros in total). Among the latter category, there were significant investments in global funds (over 13 billion euros) and in absolute return, mixed equity and international equity funds, with amounts for each category ranging between 4.2 and 5.5 billion euros.

Households: Net financial asset acquisitions (% GDP)

FIGURE 11



Source: Banco de España, Financial Accounts. Cumulative data from four quarters.

### 2.3 Outlook

According to the IMF, global GDP will grow by 3.9% this year and next year as a result of the impact of the tax reform in the US and the improvement in world trade, which will particularly have an impact on advanced economies.

The latest IMF forecasts (April 2018) indicate that global growth will accelerate even further in 2018 to 3.9%, maintaining the same rate in 2019. These forecasts are similar to those published in January of this year and 0.2 percentage points up on those of its report from October of last year. The forecast for the expected growth of advanced economies for the year was revised upwards by 0.2 percentage points to 2.5% (2.3% in 2017). A large part of this adjustment was the result of the significant tax reform adopted in the US, where the growth rate will be close to 3% this year. The euro area will grow by 2.4% in 2018 (2% in 2019), 0.2 percentage points up on the last forecast, as a result of the greater vitality of the most important economies, including the Spanish economy. Emerging and developing economies will grow by 4.9% this year and by 5.1% next year, figures that were revised slightly upwards.



A series of risks loom over this scenario. Some of these risks are financial, relating essentially to the possible build-up of imbalances between some investors, given the current context of low interest rates, and with the possibility of a repeat of episodes of turmoil in financial markets as a result of unexpected changes in monetary policy, which could particularly affect potentially overvalued assets. The other risks are basically political and include the shift towards more restrictive trade policies as a result of decisions taken by the US administration and the presence of some geopolitical conflicts.

*The main elements of uncertainty in this scenario are financial and political...*

## Gross Domestic Product (annual % change)

TABLE 4

	2014	2015	2016	2017	IMF <sup>1</sup>	
					2018	2019
World	3.6	3.4	3.2	3.8	3.9 (0.0)	3.9 (0.0)
United States	2.6	2.9	1.5	2.3	2.9 (0.2)	2.7 (0.2)
Euro area	1.3	2.1	1.8	2.3	2.4 (0.2)	2.0 (0.0)
Germany	1.9	1.5	1.9	2.5	2.5 (0.2)	2.0 (0.5)
France	0.9	1.1	1.2	1.8	2.1 (0.2)	2.0 (0.1)
Italy	0.1	1.0	0.9	1.5	1.5 (0.1)	1.1 (0.0)
Spain	1.4	3.4	3.3	3.1	2.8 (0.4)	2.2 (0.1)
United Kingdom	3.1	2.3	1.9	1.8	1.6 (0.1)	1.5 (0.0)
Japan	0.4	1.4	0.9	1.7	1.2 (0.0)	0.9 (0.0)
Emerging economies	4.7	4.3	4.4	4.8	4.9 (0.0)	5.1 (0.1)

Source: IMF.

<sup>1</sup> In brackets, change compared with the previous published forecast (IMF, forecasts published in April 2018 compared with January 2018).

In Europe, in addition to the above, the following risks may be highlighted: (i) the difficulties faced by banks in obtaining profits in a context of extremely low interest rates; (ii) the high level of public and private sector debt in several economies in view of the possible increase in rates over the medium term; (iii) the effects of Brexit, especially in the event of a hard Brexit, and (iv) the effects of an appreciation of the euro on the region's exporters.

*... some of which are also present in Europe, although this region also faces several specific risks, such as Brexit.*

According to the IMF, the Spanish economy will grow by 2.8% this year and by 2.2% in 2019, which is an upward revision of 0.4 and 0.1 percentage points, respectively, with regard to the forecast published in January. The Spanish economy faces most of the aforementioned risks, particularly the European ones, although some of them are mitigated by the strength of domestic activity. The most significant national sources of uncertainty, in addition to the crisis in Catalonia, are the need to reduce the unemployment rate and extend the consolidation of the public accounts, together with the significant challenges posed by an ageing population.

*Spain's GDP will grow somewhat less this year, but its rate of growth will remain high against the backdrop of some ongoing sources of uncertainty, several of which are national.*

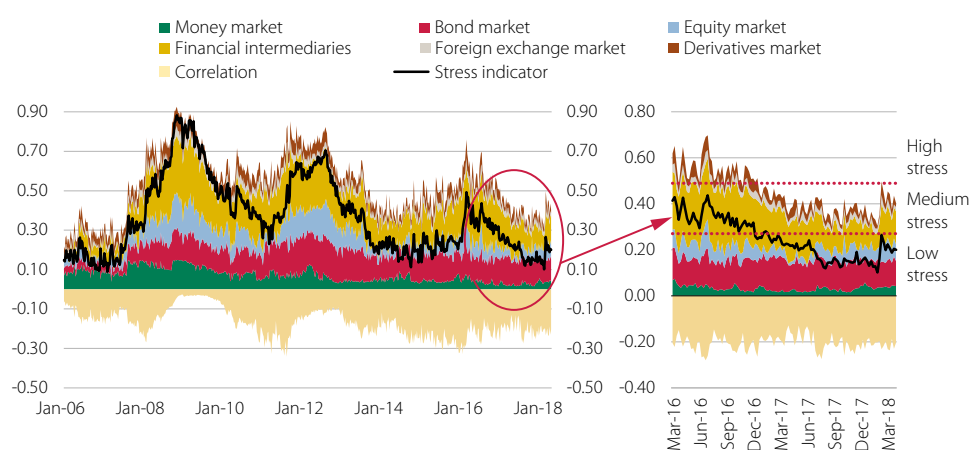
### 3 Spanish markets

*The Spanish financial markets stress index, which remained at very low levels in 2017, rose slightly in the first few months of 2018, in line with certain episodes of market volatility.*

The Spanish financial markets stress index, which had remained at very low levels through practically all last year, rose slightly in the first few days of February to 0.27, the threshold that separates low stress from medium stress<sup>11</sup>. This increase needs to be understood in the context of the episode of turmoil recorded in those days in US equity markets following publication of data showing unexpectedly strong employment and rising salaries, which led to a change in inflation expectations in the US and, consequently, the expected speed of interest rate hikes. These events had an impact on European stock markets, which suffered sharp falls in prices and significant rises in volatility. By segment, there were upturns in stress in equity, derivatives and exchange rates. In the second half of the first quarter of the year, the index fell once again to values of around 0.2 (see figure 12).

Spanish financial market stress index

FIGURE 12



Source: CNMV.

*The most significant risks in financial markets remain market risk and liquidity risk, particularly in some corporate bond segments.*

The most significant risks that continue to affect financial markets are market risk and liquidity risk, particularly in some corporate bond segments. In addition, in the context of prolonged low interest rates in Europe, it is important to bear in mind the possibility that some investors, in order to obtain higher returns, might be acquiring assets that entail too much risk for their profile. The spectrum of these assets is very wide and covers shares, high-yield debt and, more recently, much riskier assets, such as cryptocurrencies<sup>12</sup>.

11 The stress index developed by the CNMV provides a real-time measurement of systemic risk in the Spanish financial system in the range of zero to one. To do so, it assesses stress in six segments of the financial system and aggregates them into a single figure bearing in mind the correlation between said segments. Econometric estimates consider that market stress is low when the indicator stands below 0.27, intermediate in the interval of 0.27 to 0.49, and high when readings exceed 0.49. For more detailed information on the recent progress of this indicator and its components, see the CNMV's quarterly Financial Stability Note and statistical series (market stress indicators) available at [www.cnmv.es/portal/Menu/Publicaciones-Estadisticas-Investigacion](http://www.cnmv.es/portal/Menu/Publicaciones-Estadisticas-Investigacion). For further information on the indicator's methodology, see M. I. Cambón and L. Estévez (2016), "A Spanish Financial Market Stress Index (FMSI)", *Spanish Review of Financial Economics* 14, January (1), 23-41, or CNMV Working Paper No. 60 ([www.cnmv.es/portal/Publicaciones/monografias](http://www.cnmv.es/portal/Publicaciones/monografias)).

12 See the Joint press statement by the CNMV and the Banco de España on cryptocurrencies and initial coin offerings (ICOs) (<https://www.cnmv.es/loultimo/NOTACONJUNTAcriptoEN%20final.pdf>), CNMV considerations

### 3.1 Equity markets

Spanish stock markets ended the first quarter of the year with significant falls adding to the losses recorded in the second half of 2016 as a result of the expectation that the first measures to normalise monetary policy in Europe would soon be adopted. Although the Ibex 35 began the year with gains, it started to record significant losses as from the start of February. This was also the case of the main European indices, which were dragged down by the falls in US indices in view of the expectation that the Federal Reserve would accelerate its rate hike schedule following the positive data on the US economy, the strength of its labour market and the upward trend in energy prices. In addition to this landscape of greater market volatility, uncertainties arose in March as a result of the protectionist measures announced by the Trump administration, the fears of a trade war and its possible effects on global trade and the income statements of the most important international companies.

*Equity markets recorded significant losses in the first quarter due to the expectation of a change in monetary policy and contagion from the falls in US markets and fears of a trade war.*

The price falls were not spread evenly among all sectors and securities in the national market, but were concentrated in large companies, particularly companies in the electricity and gas sectors, whose regulated revenue might be affected in the event of a likely change in legislation, as well as companies in the textile sector and the construction sector. An increase in financial costs over the medium term is also expected, which should have a greater impact on companies with a high proportion of debt on their balance sheets. On the opposite side are the securities of small-cap companies, which recorded significant gains as they have lower international exposure and strong links to the economic cycle. These companies also enjoy the support of institutional investors, which applies upward pressure to their prices due to the limited supply of these types of shares. Similarly, the landscape of growth and the positive economic outlook remain in place in 2018, although in the short-term fears have grown in relation to a trade war triggered by the protectionist measures of the US administration.

*The falls in share prices were concentrated in large companies in the electricity and gas sectors, while small-cap companies saw their share prices rise given their reduced exposure to international uncertainty.*

The Ibex 35, which in the previous two quarters had recorded losses of 0.6% and 3.3%, respectively, fell once again in March, by 4.4%, to stand at its lowest level since the first quarter of 2017. This fall follows the downward trend of the leading benchmark European indices<sup>13</sup>, with the exception of the Italian index, given an environment of increased volatility and falls in trading, in contrast with the significant gains in the prices of small-cap companies (11.1%). The share price of medium-cap companies fell back slightly (-1.4%). Similarly, the indices representing Latin American shares that are listed in euros, FTSE Latibex All-Share and FTSE Latibex Top, recorded gains of 11.1% and 7.5%, respectively, in the first quarter of the year thanks to the improved outlook for growth in Latin

*The Ibex 35 fell by 4.4% in the first quarter of the year...*

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on cryptocurrencies and ICOs addressed to market professionals (<https://www.cnmv.es/portal/verDoc.axd?t={62395018-40eb-49bb-a71c-4afb5c966374}>) and the corresponding ESMA warning (<https://www.esma.europa.eu/press-news/esma-news/esas-warn-consumers-risks-in-buying-virtual-currencies>).

13 The main European indices also recorded losses: Eurostoxx 50 (-4.1%), Dax (-6.4%) and Cac (-2.7%). In contrast, the Italian Mib 30 grew by 2.6%.

American economies – especially Brazil<sup>14</sup> – as well as lower volatility in the exchange rate of their currencies against the Euro<sup>15</sup>.

### Performance of Spanish stock market indices and sectors

TABLE 5

Indices	2015	2016	2017	I-17 <sup>1</sup>	II-17 <sup>1</sup>	III-17 <sup>1</sup>	IV-17 <sup>1</sup>	I-18 <sup>1</sup>
Ibex 35	-7.2	-2.0	7.4	11.9	-0.2	-0.6	-3.3	-4.4
Madrid	-7.4	-2.2	7.6	11.8	-0.2	-0.4	-3.2	-3.9
Ibex Medium Cap	13.7	-6.6	4.0	4.3	3.3	-3.3	-0.2	-1.4
Ibex Small Cap	6.4	8.9	31.4	15.1	2.2	2.8	15.1	11.1
FTSE Latibex All-Share	-39.2	71.0	9.0	10.0	-9.7	12.4	-2.4	11.1
FTSE Latibex Top	-34.6	67.8	7.3	12.4	-9.6	13.8	-7.2	7.5
<b>Sectors<sup>2</sup></b>								
<b>Financial and real estate services</b>	<b>-24.2</b>	<b>-1.6</b>	<b>10.5</b>	<b>15.2</b>	<b>-0.5</b>	<b>2.6</b>	<b>-6.1</b>	<b>-3.7</b>
Banks	-26.0	-1.8	10.6	16.0	-0.9	3.0	-6.6	-4.5
Insurance	-5.0	15.5	0.1	9.7	-0.4	-7.8	-0.6	-0.9
Real estate and others	18.4	-2.3	17.6	8.0	8.1	0.0	0.8	-5.6
<b>Oil and energy</b>	<b>0.6</b>	<b>0.8</b>	<b>3.9</b>	<b>7.2</b>	<b>-0.4</b>	<b>-1.0</b>	<b>-1.7</b>	<b>-4.8</b>
Oil	-34.9	32.6	9.9	7.9	-7.4	16.3	-5.4	-2.2
Electricity and gas	9.6	-4.3	2.0	7.0	1.2	-5.2	-0.6	-6.1
<b>Basic materials, industry and construction</b>	<b>2.1</b>	<b>2.0</b>	<b>2.6</b>	<b>8.9</b>	<b>-0.9</b>	<b>-8.9</b>	<b>4.4</b>	<b>-1.8</b>
Construction	4.9	-7.9	9.9	9.0	3.6	-6.4	4.0	-7.3
Manufacture and assembly of capital goods	49.0	7.8	-19.3	11.4	-7.7	-23.5	2.7	8.1
Minerals, metals and metal processing	-30.8	48.8	14.2	6.8	-5.4	4.3	8.3	1.8
Engineering and others	-39.6	9.9	-9.9	-1.4	-6.5	-6.4	4.5	-2.0
<b>Technology and telecommunications</b>	<b>-5.2</b>	<b>-9.0</b>	<b>7.5</b>	<b>16.2</b>	<b>-6.1</b>	<b>2.7</b>	<b>-4.2</b>	<b>-0.2</b>
Telecommunications and others	-12.3	-14.2	-5.1	18.6	-12.3	1.6	-10.3	-0.1
Electronics and software	22.2	7.9	36.6	10.7	9.3	5.0	7.6	-0.3
<b>Consumer goods</b>	<b>30.9</b>	<b>0.2</b>	<b>-2.1</b>	<b>4.4</b>	<b>3.0</b>	<b>-3.9</b>	<b>-5.3</b>	<b>-8.4</b>
Textile, clothing and footwear	33.6	2.6	-10.4	1.9	1.6	-5.1	-8.9	-12.4
Food and drink	26.4	-5.4	5.2	0.4	4.9	-1.1	0.9	3.7
Pharmaceuticals and biotechnology	23.5	-6.4	14.6	15.5	4.4	-4.0	-1.0	-5.6
<b>Consumer services</b>	<b>10.4</b>	<b>-8.0</b>	<b>23.3</b>	<b>13.0</b>	<b>7.2</b>	<b>-3.8</b>	<b>5.8</b>	<b>-4.0</b>
Motorways and car parks	-7.9	-3.1	39.5	13.6	7.4	5.4	8.5	-1.8
Transport and distribution	29.6	-15.7	32.3	16.3	13.2	-7.3	8.3	-3.4

Sources: BME and Thomson Datastream.

1 Change on the previous quarter.

2 IGBM sectors. Under each sector, data are provided for the most representative sub-sectors.

14 The main Brazilian stock market index gained 11.7%.

15 In the first quarter of the year, the Brazilian real depreciated by 2.1% against the euro.

With the exception of some companies, every sector ended the quarter with falls, which were particularly significant in the consumer goods and the oil and energy sectors. Among the former, there was a noteworthy fall in the leading textile company, which suffered from the uncertainties relating to its digital transformation, which is necessary to face the strong competition from new business models orientated towards e-commerce. Companies in the oil and energy sector were affected by the potential impact on their income statements of regulatory changes reducing the remuneration from the regulated revenue of electricity and gas companies (see table 5). Furthermore, investors are starting to take into account the impact of a hike in interest rates in the medium term on corporate finance costs, particularly those with a high level of debt. In contrast, the most cyclical companies have benefited from the significant economic growth.

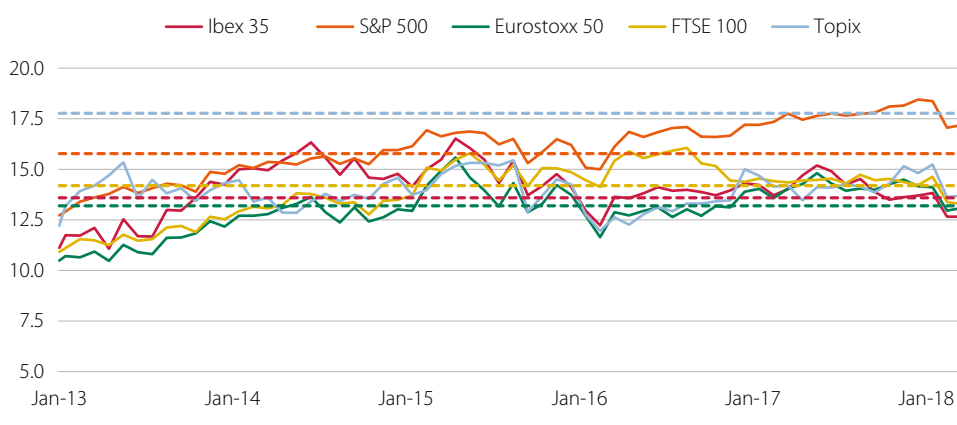
... with falls in most market sectors, which were sharper in the consumer goods sector and the oil and energy sector.

The fall in share prices in the quarter, together with the expected growth in corporate profits over the coming months, allowed the price-earnings (P/E) ratio of the Ibx 35 to fall from 13.7 in the middle of December to 12.7 in March, its lowest level since the first quarter of 2016. As shown in figure 13, the P/E ratios of the most significant stock market indices performed similarly over the quarter and incorporate the adjustments in their prices. With the exception of the US S&P 500 index, every ratio stands below its average value over the period between 2010 and 2017. At year-end 2017, they all had higher values except the Japanese Topix index.

The fall in share prices in the quarter, together with the expected growth in corporate profits, led to a fall in the price-earnings (P/E) ratio to its lowest level since the first quarter of 2016.

Price-earnings ratio<sup>1</sup> (P/R)

FIGURE 13



Source: Thomson Datastream. Data to 31 March.

1 Twelve-month forward earnings.

Ibx 35 volatility, which had remained at low levels over the previous year, when it reached its lowest level since 2015, began the quarter with significant gains, as did the leading international stock markets and in line with the sharp increase in volatility in US stock markets, where the VIX indicator exceeded 30%<sup>16</sup>. At the end of the first quarter, Ibx 35 volatility eased and stood at around 15%, slightly below the average value for the quarter (15.6%), although above the figure for the end of the last quarter of 2017 (13.4%). The performance of the Spanish market with regard to volatility was similar to that seen in other European indices, such as the

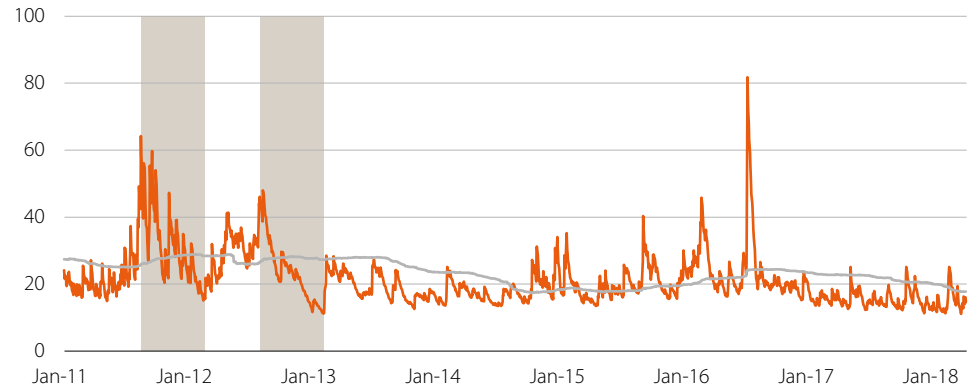
Volatility, which had been at very low levels, rose significantly, as in the major international markets.

16 At the end of 2017, the VIX index stood at below 10%.

Eurostoxx 50 (13.4% at the end of the quarter), and at any event with shallower variations than those of the US indices (the VIX moved in a range of 22 percentage points over the quarter).

### Historical volatility of the Ibox 35

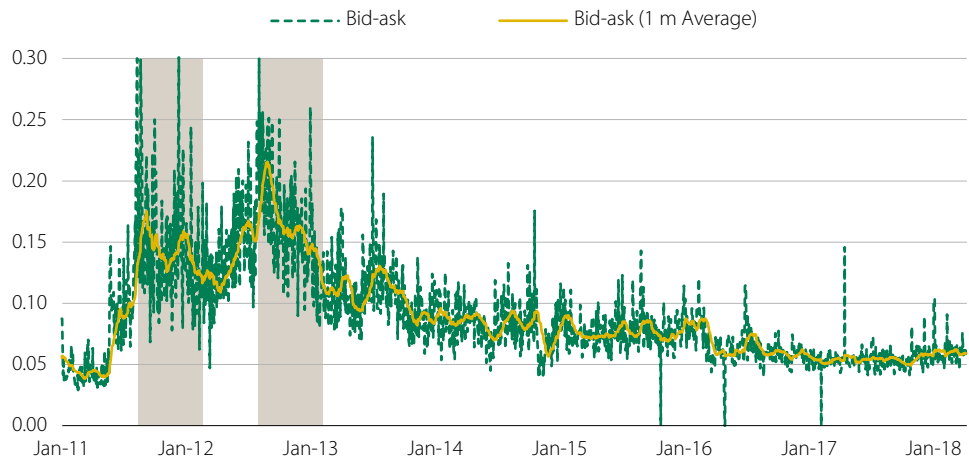
FIGURE 14



Sources: Thomson Datastream and CNMV. The blue line tracks conditional volatility and the red line unconditional volatility. The grey shaded areas refer to the introduction and lifting of the short selling ban running from 11 August 2011 to 16 February 2012, and the later ban starting on 23 July 2012 and ending on 1 February 2013. The first ban affected financial institutions and the second ban applied to all listed companies.

### Ibox 35 liquidity. Bid-ask spread (%)

FIGURE 15



Sources: Thomson Datastream and CNMV. The curve represents the bid-ask spread of the Ibox 35 along with the average of the last month. The grey shaded areas refer to the introduction and lifting of the short selling ban running from 11 August 2011 to 16 February 2012, and the later ban starting on 23 July 2012 and ending on 1 February 2013. The first ban affected financial institutions and the second ban applied to all listed companies.

*Liquidity remained at satisfactory levels, although it worsened slightly.*

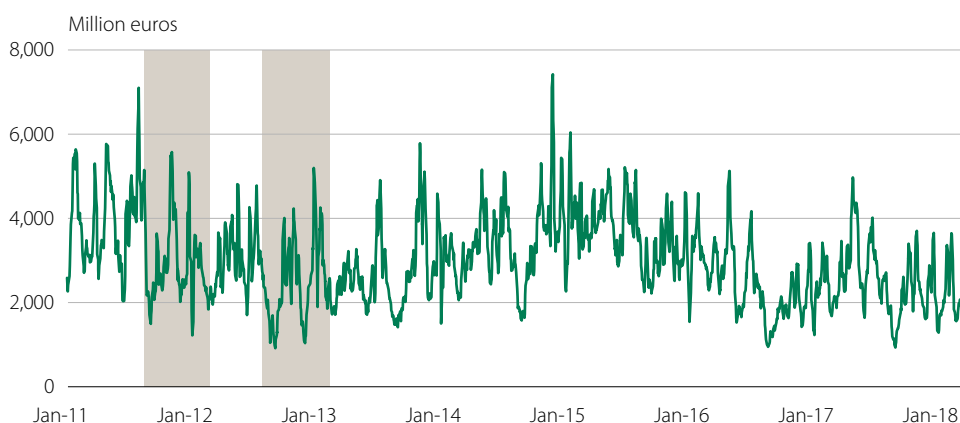
Ibox 35 liquidity, as measured by the bid-ask spread, worsened slightly in the first quarter of the year, with slight upturns during sessions with higher volatility. Nevertheless, the Ibox bid-ask spread stood at 0.06% in the first quarter of the year, slightly above the 2017 average (0.054%), but below the historic average of this indicator (0.095%).

Despite the falls in prices on stock markets, trading in Spanish equity improved in year-on-year terms in the first quarter thanks to the reduction in uncertainty about the Spanish economy and a possible increase in algorithmic trading in an increasingly volatile context, a large part of which is concentrated in multilateral trading facilities (MTFs). The volume of Spanish equity trading grew by 5.4% in the first quarter of the year to 234 billion euros, in line with the trend seen in most European stock markets, which also recorded increases in trading<sup>17</sup>. Average daily trading on the electronic market stood at 2.29 billion euros in the first quarter, a little under the average for 2017 (2.51 billion euros).

*Despite the fall in prices, Spanish equity trading grew by 5.4% in year-on-year terms.*

### Daily trading on the Spanish stock market<sup>1</sup>

FIGURE 16



Source: CNMV. The grey shaded areas refer to the introduction and lifting of the short selling ban running from 11 August 2011 to 16 February 2012, and the later ban starting on 23 July 2012 and ending on 1 February 2013.

<sup>1</sup> Moving average of five trading days.

With regard to the distribution of the trading of Spanish securities, trading on other regulated markets and multilateral trading facilities stood at 91.42 billion euros in the first quarter of the year, the highest value in the entire historic series, a figure that is 32% up on the same period of 2017, while trading on Bolsas y Mercados Españoles (BME) fell by 6.6%. Consequently, trading in Spanish securities on foreign markets, whose share had fallen in the last year to around one third of the total amount traded, grew once again significantly in 2018, to around 40%, its historic high, above the 33.3% of the previous quarter and the 31.7% of 2017 as a whole. The regulated market Cboe Global Markets (Cboe), which operates through two different order books, BATS and Chi-X, with trading of over 73.5 billion euros, accounted for over two thirds of the total amount of Spanish securities traded abroad and 51% of the amount traded in the home market. In contrast, both Turquoise and the other operators, which had risen significantly in the previous year, saw their market shares fall to 11.9% and 7.6%, respectively.

*The trading of Spanish securities abroad accounted for almost 40% of total trading of these securities in the quarter.*

<sup>17</sup> Source: Federation of European Securities Exchanges (FESE). Data to February 2018.

## Trading in Spanish shares listed on Spanish exchanges<sup>1</sup>

TABLE 6

Million euros	2014	2015	2016	2017	III-17	IV-17	I-18
<b>Total</b>	<b>1,002,189.0</b>	<b>1,161,482.8</b>	<b>877,413.3</b>	<b>934,377.1</b>	<b>193,005.3</b>	<b>233,038.6</b>	<b>234,555.7</b>
<b>Listed on SIBE</b>	<b>1,002,095.9</b>	<b>1,161,222.9</b>	<b>877,402.7</b>	<b>934,368.3</b>	<b>193,004.8</b>	<b>233,036.3</b>	<b>234,554.7</b>
BME	849,934.6	925,978.7	631,107.2	634,990.9	125,110.5	154,495.8	143,131.5
Chi-X	95,973.0	150,139.9	117,419.4	117,899.2	27,142.3	29,128.9	26,830.1
Turquoise	28,497.5	35,680.5	51,051.8	44,720.1	9,601.2	10,880.6	10,900.3
BATS	18,671.0	35,857.6	44,839.8	75,411.6	19,378.6	23,075.6	46,765.7
Other <sup>2</sup>	9,019.8	13,566.2	32,984.5	61,346.5	11,772.2	15,455.3	6,927.0
<b>Open outcry</b>	<b>92.4</b>	<b>246.1</b>	<b>7.5</b>	<b>8.1</b>	<b>0.5</b>	<b>2.1</b>	<b>1.0</b>
Madrid	32.7	19.4	3.2	1.8	0.1	0.0	0.0
Bilbao	14.3	7.5	0.0	0.0	0.0	0.0	0.0
Barcelona	45.2	219.1	4.1	6.3	0.4	2.1	0.9
Valencia	0.3	0.1	0.0	0.0	0.0	0.0	0.0
<b>Second market</b>	<b>0.7</b>	<b>13.8</b>	<b>3.2</b>	<b>0.7</b>	<b>0.0</b>	<b>0.2</b>	<b>0.1</b>
<b>Pro memoria</b>							
Foreign shares traded on BME	14,508.9	12,417.7	6,033.0	6,908.0	1,318.6	1,143.0	1,153.0
Alternative stock market (MAB)	7,723.2	6,441.7	5,066.2	4,985.8	1,010.5	1,317.3	1,401.5
Latibex	373.1	258.7	156.7	130.8	12.3	16.1	43.8
ETFs	9,849.4	12,633.8	6,045.2	4,464.1	699.3	1,472.8	981.0
Total BME trading	882,482.3	957,990.5	648,418.9	651,488.5	128,151.5	158,447.5	146,711.9
% Spanish shares on BME vs. total Spanish shares	84.8	80.1	71.9	68.3	65.1	66.7	61.4

Sources: Bloomberg and CNMV.

- 1 Includes trading of Spanish shares subject to market or MTF rules (lit plus dark). Spanish shares on Spanish stock exchanges are those with a Spanish ISIN that are admitted to trading on the regulated market of Bolsas y Mercados Españoles (BME), i.e., not including the Alternative Stock Market MAB). Foreign shares are those which are admitted to trading on the regulated market of BME whose ISIN is not Spanish.
- 2 Difference between the turnover of the EU Composite calculated by Bloomberg for each share and the turnover of the markets and MTFs.

*Application of MiFIR with regard to transparency obligations relating to trading orders at reference prices from another market...*

On 8 March, the CNMV decided to suspend for six months the use of transparency obligations waivers of trading orders at reference prices of other markets<sup>18</sup> as they exceeded the trading threshold of 8% referred to in Article 5.1(b) of MiFIR with regard to the trading of thirteen shares<sup>19</sup>. MiFIR (Regulation (EU) 600/2014) establishes certain pre-trade transparency requirements applicable to shares and other financial instruments and recognises the possibility of trading venues requesting that competent authorities implement waivers relating to orders at reference prices and those on negotiated or pre-arranged transactions. However, in order to ensure that the use of these waivers does not hinder price discovery, MiFIR establishes a double volume cap rule on trading, such that in the event the rule is exceeded, the waivers will be suspended for six months.

<sup>18</sup> Regulated pursuant to Article 4.1 of MiFIR, in stock markets.

<sup>19</sup> See the communication [www.cnmv.es/portal/verDoc.axd?t={d4ab4246-6ddb-41f4-b0d5-1d05866a4399}](http://www.cnmv.es/portal/verDoc.axd?t={d4ab4246-6ddb-41f4-b0d5-1d05866a4399})



In Spain, the CNMV has authorised a waiver on transaction matching, on shares or ETFs admitted to trading on the Spanish Stock Exchanges and MAB or LATIBEX, at the average price of the best current buying and selling position in a reference market. On 7 March, ESMA published for the first time the equity instruments that exceeded the trading volume caps, which included thirteen instruments admitted to trading in Spanish stock markets. This information led to the CNMV's decision to suspend the waiver of the transparency obligations for these shares until 12 September of this year.

... meant that in March, the CNMV decided to suspend for thirteen instruments the waivers to these transparency obligations for six months as they had exceeded certain trading thresholds.

## Capital increases and public offerings<sup>1</sup>

TABLE 7

	2015	2016	2017	II-17	III-17	IV-17	I-18
<b>NUMBER OF ISSUERS<sup>2</sup></b>							
<b>Total</b>	<b>50</b>	<b>45</b>	<b>46</b>	<b>16</b>	<b>17</b>	<b>17</b>	<b>15</b>
Capital increases	45	45	44	13	17	17	14
Primary offerings	0	3	3	1	1	1	0
Public offering of shares	6	2	4	3	0	1	1
<b>NUMBER OF ISSUES<sup>2</sup></b>							
<b>Total</b>	<b>111</b>	<b>81</b>	<b>89</b>	<b>18</b>	<b>18</b>	<b>25</b>	<b>21</b>
Capital increases	99	79	82	14	18	24	20
Primary offerings	0	4	4	1	1	1	0
Public offering of shares <sup>3</sup>	12	2	7	4	0	1	1
<b>CASH AMOUNT<sup>2</sup> (million euros)</b>							
<b>Total</b>	<b>37,065.5</b>	<b>20,251.7</b>	<b>32,538.1</b>	<b>11,068</b>	<b>8,591</b>	<b>2,656.7</b>	<b>3,904.8</b>
Capital increases	28,733.9	19,745.1	29,593.6	10,049.8	8,590.6	2,089.5	3,259.2
Primary offerings	0.0	807.6	956.2	687.5	68.8	100.0	0.0
Bonus issues	9,627.8	5,898.3	3,807.3	850.3	1,152.5	720.1	1,362.8
Of which, scrip dividend <sup>4</sup>	9,627.8	5,898.3	3,807.3	850.3	1,152.5	720.1	1,362.8
Capital increases by debt conversion	1,868.7	2,343.9	1,648.8	23.6	0.0	125.5	1.6
Capital increases against non-monetary considerations <sup>5</sup>	365.2	1,791.7	8,469.3	8,122.6	238.8	49.9	1,179.1
With pre-emptive subscription right	7,932.6	6,513.3	7,831.4	11.7	7,102.9	531.6	574.7
Other increases (including accelerated book builds)	8,939.7	2,390.2	6,880.5	354.1	27.6	562.4	141.0
Public offering of shares	8,331.6	506.6	2,944.5	1,018.0	0.0	567.3	645.7
<b>Pro memoria: MAB transactions<sup>6</sup></b>							
Number of issuers	16	15	13	6	1	3	1
Number of issues	18	21	15	6	1	4	3
Cash amount (million euros)	177.8	219.7	129.9	84.2	10.9	26.2	13.2
Capital increases	177.8	219.7	129.9	84.2	10.9	26.2	13.2
Of which, primary offerings	21.6	9.7	17.1	14.1	0.0	3.0	0.0
Public offering of shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sources: BME and CNMV.

- 1 Primary offerings and Public offering of shares are usually known as IPO (Initial Offering) in data vendors.
- 2 Transactions registered with the CNMV. Not including figures for MAB, ETFs or Latibex.
- 3 Transactions linked to the exercise of green shoe options are separately accounted for.
- 4 In scrip dividends, the issuer gives existing shareholders the option of receiving their dividend in cash or converting it into shares in a bonus issue.
- 5 Capital increases for non-monetary consideration have been stated at market value.
- 6 Transactions not registered with the CNMV.

*The issuance of new shares was largely the result of capital increases under scrip dividends and for non-monetary consideration. There was also one public offering of shares by a real estate company.*

In the first quarter of the year, equity issues made on Spanish markets amounted to 3.9 billion euros, less than half the sum issued in the same period of the previous year, when the financial restructuring of Abengoa took place. If we discount the amount issued by this company, equity issues in the first quarter of the year would have grown by 34.7% on the same period of 2017. On this occasion, there was one public offering of shares for an amount of 645 million euros, corresponding to a real estate company, as was the case in the last quarter of 2017. Capital increases consisted primarily of scrip dividends, which reached values greater than those recorded in the same period of 2017<sup>20</sup>, and, to a lesser extent, capital increases for a non-monetary consideration, which have grown as a result of the issue of Bankia shares in the merger by absorption with Banco Mare Nostrum (BMN). Capital increases with pre-emptive subscription rights also rose and amounted 575 million euros.

## Capital Markets Union

EXHIBIT 2

Over 2017, the European Commission specified many of the measures of its Action Plan on Building a Capital Markets Union in 2019. The aim is to improve the access of savings to investment and to provide sources of non-bank financing. In January, the European Commission undertook a public consultation on the effectiveness of the measures that have already been adopted with the aim of reviewing the initial strategy, and in June it published a communication on the mid-term review. The main actions that have already been adopted are as follows:

- **Financing for innovation, start-ups and non-listed companies:** i) agreement of the co-legislators on a review of the EuVECA<sup>1</sup> and EuSEF<sup>2</sup> Regulations; ii) publication of a report on practices to apply tax incentives to venture capital and business angels; iii) publication of a FinTech action plan, and iv) publication of a proposal for a regulation on European crowdfunding service providers.
- **Making it easier for companies to enter and raise capital on capital markets:** i) publication of the Prospectus Regulation; ii) publication of a report by the expert group on corporate bond market liquidity; iii) publication of a report with the launch of the public consultation on barriers to SME admission on public markets and SME growth markets, and (iv) publication of a legislative proposal to improve the proportionality of prudential rules for investment firms.
- **Promoting long-term, infrastructure and sustainable investment:** i) in the context of the Capital Requirements Directive and Regulation, agreement on the calibration of investments in infrastructure; ii) publication of a public consultation on institutional investors and asset managers' duties regarding sustainability; iii) publication of an action plan on sustainable finance; and iv) legislative proposal on facilitating cross-border distribution of investment funds.

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20 It is common in the first few days of January each year for several large companies – many from the electricity and gas sector – to distribute scrip dividends.

- **Fostering retail investment:** i) study on distribution systems of retail investment products, and ii) recurrent reporting by the European Supervisory Authorities on cost and performance of the principal categories of long-term retail investment and pension products.
- **Strengthening banking capacity to support the wider economy:** i) political agreement on legislative proposal for simple, transparent and standardised securitisation, and ii) legislative proposal for an EU framework on covered bonds.
- **Strengthening the capacity of EU capital markets:** i) publication of a proposed amendment to the European System of Financial Supervision, and ii) design of an EU strategy on local and regional capital market developments.
- **Facilitating cross-border investment:** i) publication of a report on barriers to the free movement of capital; ii) publication of an expert group report and launch of a public consultation on “Giovannini barriers” relating to post-trade; iii) publication of a code of conduct on withholding tax; iv) adoption of a regulation on the establishment of the structural reform support programme for the period 2017 to 2020; v) publication of a legislative proposal on the law applicable to cross-border transactions in claims and securities, and vi) publication of a communication clarifying conflict-of-law rules for securities.

1 Regulation (EU) 345/2013, of the European Parliament and of the Council, on European venture capital funds.

2 Regulation (EU) 346/2013, of the European Parliament and of the Council, on European social entrepreneurship funds.

### 3.2 Fixed-income markets

Spanish fixed-income markets, like those of other European countries, remained broadly stable in the final months of 2017, although anticipating a toughening of the ECB’s monetary policy, whose purchase programmes will likely be reduced to nothing over the year. The ECB’s confirmation in January that it would extend its purchase programme until September<sup>21</sup>, although with a reduced amount of 30 billion euros per month, as well as removal of the possibility of extending the amount of said programme, led to slight upturns in the yields on most medium and long-term public and private debt assets in Europe.

In Spain, the increases were more than offset by the fall in the sovereign credit spread, which took place following the upgrading of the sovereign rating set by Fitch and Standard & Poor’s<sup>22</sup>. In this context, Spanish government debt yields, like

*The expectation of a normalisation of monetary policy led to slight upturns in the yields of medium and long-term public and private debt in Europe...*

*...offset in Spain by the fall in the risk premium as a result of the buoyant economy, the improvement in the credit rating and an easing of political uncertainties.*

21 At the end of January, the ECB confirmed that the net asset purchases for a monthly amount of 30 billion euros would continue until the end of September, and in March it confirmed that it was dropping the possibility of increasing the volume of asset purchases.

22 In January, Fitch upgraded Spain’s sovereign credit rating from BBB+ to A- with a stable outlook, while Standard & Poor’s upgraded the rating in March from BBB + to A- with a positive outlook.

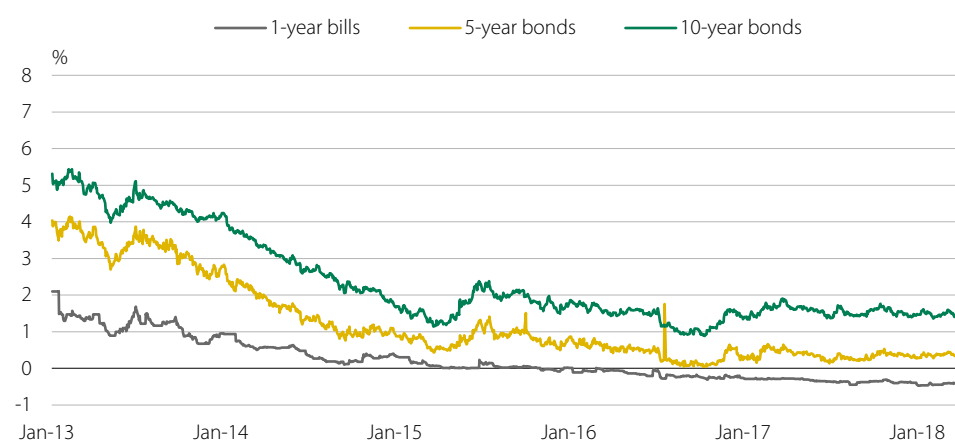
those in Portugal<sup>23</sup> and Italy, fell slightly, with sharp falls in long-term debt, favoured by the improvement in their credit risk. Corporate debt yields also fell slightly, as they are still supported by the ECB's corporate sector purchase programme<sup>24</sup>. The Spanish credit spread fell significantly to 67 bp, its lowest value since the start of the sovereign debt crisis in 2010. This fall is the result of the improvement in the economy, the upgrading of the sovereign credit rating and the easing of political uncertainties.

*Despite the expectations of increasingly expensive financing over the long term, debt issues by Spanish issuers have fallen.*

Despite the favourable context, debt issuance by Spanish issuers fell moderately in the first quarter of the year, although unevenly among the different asset types. In particular, there was year-on-year growth in issues of covered bonds and commercial paper, while issues of bonds (both those registered with the CNMV and those registered abroad) fell despite the expectations of increasingly expensive financing over the long term. Spanish issuers are likely to cover a large part of their financing needs in 2017, taking advantage of the positive market situation.

### Spanish government debt yields

FIGURE 17



Source: Thomson Datastream.

*Yields on short-term government bonds remain at historic lows after over two years in negative figures.*

Yields on short-term government bonds, which ended 2017 at historic lows, remained broadly unchanged in the first quarter of the year for the shortest terms, and performed rather unevenly for medium-term and long-term bonds. Despite expectations of a toughening of monetary policy in the euro area, the yields on short-term government bonds remained negative, as has been the case for over two years now. Their movements were conditioned by the accommodative monetary policy followed by the ECB, whose official rates have remained at historic lows. At the end of March, the secondary market yields on three-month, six-month and twelve-month Letras del Tesoro stood at -0.55%, -0.46% and -0.42%, respectively, similar to the levels of the previous quarter and slightly below the minimum annual yield of 0.4% established by the ECB in its debt purchase programmes (the deposit facility rate).

23 In September 2017, Standard & Poor's raised its rating on Portugal to BBB-, with its debt therefore becoming investment grade.

24 In the framework of its Public Sector Purchase Programme (PSPP), which had accumulated by mid-March public debt purchases in an amount of 1.94 trillion euros, with 235.74 billion euros corresponding to Spanish debt.

All Letras del Tesoro auctions were again settled at negative rates. The last ones carried out in March were settled at similar rates to the previous auction and even lower in some terms. Corporate debt traced a similar path, with insignificant changes over the quarter. Yields when issued stood at values ranging between 0.24% for the twelve-month benchmark and 0.29% for commercial paper at three months (see table 8).

### Short-term interest rates<sup>1</sup>

TABLE 8

%	Dec-15	Dec-16	Dec-17	Jun-17	Sep-17	Dec-17	Mar-18
<b>Letras del Tesoro</b>							
3 months	-0.15	-0.47	-0.62	-0.41	-0.42	-0.62	-0.55
6 months	-0.01	-0.34	-0.45	-0.39	-0.39	-0.45	-0.46
12 months	-0.02	-0.25	-0.42	-0.36	-0.36	-0.42	-0.42
<b>Commercial paper<sup>2</sup></b>							
3 months	0.31	0.18	0.39	0.18	0.28	0.39	0.29
6 months	0.42	0.20	0.26	0.42	0.04	0.26	0.22
12 months	0.53	0.15	0.19	0.10	-0.03	0.19	0.24

Sources: Thomson Datastream and CNMV.

1 Monthly average of daily data.

2 Interest rates at issue.

Yields on medium-term and long-term government bonds began the quarter with rises in Europe, but in Spain these rises were subsequently offset by the fall in the risk premium, which allowed the benchmark ten-year bond yields to remain at historic lows. The average yield on three-year, five-year and ten-year government bonds in the secondary market in March stood at -0.07, 0.3% and 1.35%, respectively (see table 9). The yields on the three-year and five-year benchmarks have hardly changed although it should be pointed out that the yield remains negative up to a term of four years. The ten-year yield fell by 9 bp.

*The long-term yield on government bonds fell thanks to the fall in the risk premium.*

### Medium and long-term bond yields<sup>1</sup>

TABLE 9

%	Dec-15	Dec-16	Dec-17	Jun-17	Sep-17	Dec-17	Mar-18
<b>Government bonds</b>							
3 year	0.24	0.04	-0.09	-0.15	-0.07	-0.09	-0.07
5 year	0.72	0.35	0.31	0.22	0.31	0.31	0.30
10 year	1.72	1.44	1.46	1.46	1.57	1.46	1.35
<b>Corporate bonds</b>							
3 year	0.66	0.69	0.44	0.62	0.55	0.44	0.51
5 year	1.95	1.43	0.41	1.05	0.91	0.41	0.39
10 year	2.40	2.14	1.16	1.82	1.92	1.16	1.04

Sources: Thomson Datastream, Reuters and CNMV.

1 Monthly average of daily data.

Corporate debt yields also fell as a result of uncertainties in equity markets and the positive impact of the ECB's debt purchase programme despite it becoming increasingly limited.

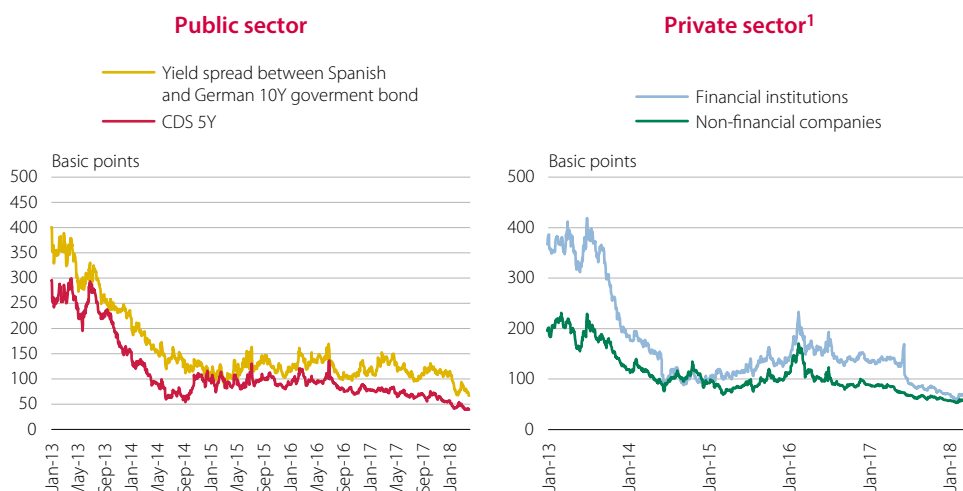
The sovereign risk premium fell significantly (almost 50 bp to 67 bp), to stand at its lowest level since 2010.

Corporate debt yields recorded a similar performance as, despite the expectations of a hardening of monetary policy, which favours an increase in yields, investors continue opting to buy corporate debt, which forces down yields. In this context, yields on three-year corporate bonds rose by 7 bp in the first quarter of the year to 0.51%, while the yields on five-year and ten-year bonds fell by 2 bp and 12 bp to 0.39% and 1.04%, respectively. They still benefited from the positive impact of the ECB's corporate sector purchase programme, some of which is carried out directly in the primary market<sup>25</sup> and is concentrated in issues with longer maturities.

The sovereign risk premium began the quarter with significant falls triggered by the positive performance of the Spanish economy, as reflected in the improvement in the sovereign debt rating, together with the easing of political uncertainties and, to a lesser extent, the positive impact of the ECB maintaining its public sector purchase programme. The risk premium, measured as the spread between the Spanish ten-year bond and the German benchmark stood at 67 bp at the end of March compared with 114 bp at the beginning of the year. The cumulative fall over the first quarter was therefore close to 50 bp, which places the risk premium at its lowest level since 2010, when the sovereign debt crisis in Europe began. The credit risk premium, assessed through the CDS of the Spanish sovereign bond, followed a similar path, although with more modest falls. It stood at 39 bp at the end of the quarter compared with 57 bp at the start of the year, the lowest level since 2008 (see left-hand panel of figure 18).

Risk premium paid by Spanish issuers

FIGURE 18



Sources: Thomson Datastream and CNMV.

1 Simple average of the 5-year CDS of a sample of issuers.

The risk premiums of the private sectors of the economy have risen slightly, which might be due to the likely impact of a tightening of monetary policy on their finance costs.

The risk premiums of the private subsectors of the economy diverged from that of sovereign debt, with slight upturns, which may be explained by the outlook of a tightening of the ECB's monetary policy and the impact that the increase in the cost of financing would have on the most leveraged companies. Although, in theory, a

25 Purchases in the primary market in February accounted for 16.13% of total purchases performed under this programme.

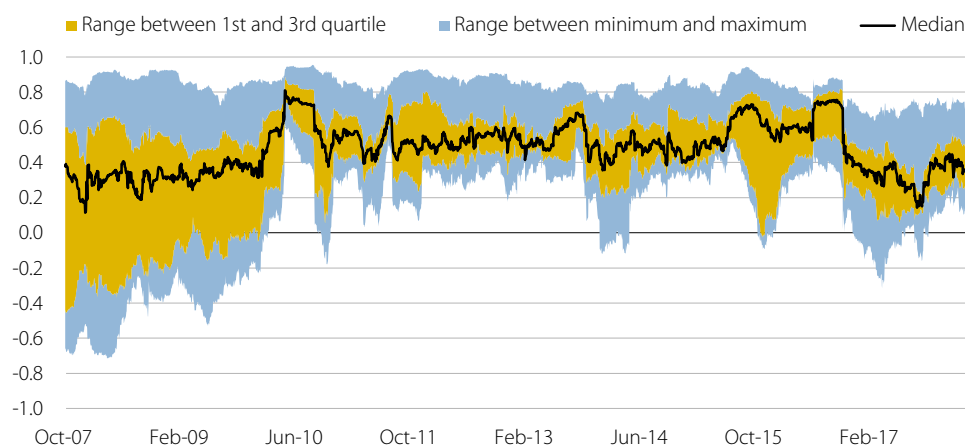
scenario of a normalisation in monetary policy and rate hikes favours a widening of the margins of financial institutions, they might suffer from a scenario of greater market volatility as well as greater uncertainties in their business as a result of the increase in the finance costs of their clients. In addition, although there has been no specific purchase programme for their debt, financial institutions benefited from the positive effect of the covered bond purchase programme (CBPP3) and the asset-backed securities purchase programme (ABSPP)<sup>26</sup>, whose purchases have also been reduced. The risk premiums of large non-financial companies would have also suffered both effects, i.e., both the effect of a possible increase in interest rates and the reduced impact of the corporate sector purchase programme<sup>27</sup>. As shown in the right-hand panel of figure 18, the average of the CDS of financial institutions stood at 76 bp at the end of the quarter, above the 70 bp at the end of 2017. Meanwhile, in non-financial companies, the average of the risk premiums on the same date was 62 bp, compared with 58 bp at the beginning of the year.

The level of correlation between the prices of the different financial asset classes rose significantly in the second half of 2017, coinciding with times of greatest tension in the Catalan institutional crisis. This value has remained relatively stable since then, with a temporary upturn at the start of the quarter to its highest value of the last year. Nevertheless, it remains below the average recorded over the last decade.

*The correlation between asset prices, which had increased in the second half of 2017, has remained stable.*

Indicator of correlation between asset classes<sup>1</sup>

FIGURE 19



Sources: Thomson Datastream and CNMV.

- 1 The indicator of correlation between asset classes is based on pairs of correlations calculated using daily data in three-month windows. The asset classes are sovereign debt, corporate fixed income of financial and non-financial firms and Ibx 35 stocks of financial companies, utilities and the other sectors. A high correlation between Spanish asset classes points to gregarious investor behaviour, possibly due to the heightened volatility typical at times of stress. Also, diversification would hold out fewer advantages since it would be harder to avoid exposure to sources of systemic risk.
- 2 As from 7 June 2017, the calculation of the return on the asset class corresponding to financial fixed income excludes the CDS on the five-year senior debt of Banco Popular.

26 Up to 16 March, the covered bond purchase programme (CBPP3) had accumulated covered bonds in an amount of 249.57 billion euros (35.6% of which were bought on the primary market), while the asset-backed securities purchase programme (ABSPP) held a balance of 26.27 billion euros (45.6% of which were bought on the primary market).

27 The ECB has purchased securities of 17 Spanish issuers under this programme.

**Gross fixed-income issues**

TABLE 10

	2014	2015	2016	2017	2017		2018
					III	IV	I
<b>Registered with the CNMV</b>							
<b>NOMINAL AMOUNT</b> (million euros)	<b>130,258</b>	<b>136,607</b>	<b>139,028</b>	<b>109,487</b>	<b>13,156</b>	<b>47,852</b>	<b>19,959</b>
Mortgage covered bonds	23,838	31,375	31,643	29,824	5,175	13,349	5,125
Territorial covered bonds	1,853	10,400	7,250	350	0	0	0
Non-convertible bonds and debentures	41,155	39,100	40,170	30,006	1,125	12,632	4,983
Convertible/exchangeable bonds and debentures	750	53	0	0	0	0	0
Asset-backed securities	29,008	28,370	35,505	29,415	2,969	16,328	5,431
Commercial paper <sup>1</sup>	33,654	27,310	22,960	17,911	2,906	5,544	3,170
Securitised	620	2,420	1,880	1,800	0	800	0
Other commercial paper	33,034	24,890	21,080	16,111	2,906	4,744	3,170
Other fixed-income issues	0	0	1,500	981	981	0	0
Preferred shares	0	0	0	1,000	0	0	1,250
<b>Pro memoria:</b>							
Subordinated issues	7,999	5,452	4,279	6,505	1,370	1,659	1,857
Underwritten issues	196	0	421	0	0	0	0
					2017		2018
<b>Abroad by Spanish issuers</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	III	IV	I <sup>2</sup>
<b>NOMINAL AMOUNT</b> (million euros)	<b>56,736</b>	<b>66,347</b>	<b>58,587</b>	<b>84,771</b>	<b>22,701</b>	<b>18,379</b>	<b>14,866</b>
Long term	35,281	33,362	31,655	61,125	14,931	11,445	5,038
Preferred shares	5,602	2,250	1,200	5,844	1,750	2,094	0
Subordinated debt	3,000	2,918	2,333	5,399	1,050	0	0
Bonds and debentures	26,679	28,194	28,122	49,882	12,131	9,351	5,038
Asset-backed securities	0	0	0	0	0	0	0
Short term	21,455	32,984	26,932	23,646	7,770	6,934	9,828
Commercial paper	21,455	32,984	26,932	23,646	7,770	6,934	9,828
Securitised	0	0	0	0	0	0	0
<b>Pro memoria: Gross issues of subsidiaries of Spanish companies resident abroad</b>							
					2017		2018
	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	III	IV	I <sup>2</sup>
<b>NOMINAL AMOUNT</b> (million euros)	<b>42,170</b>	<b>55,286</b>	<b>56,674</b>	<b>65,423</b>	<b>12,075</b>	<b>21,872</b>	<b>15,550</b>
Financial institutions	10,201	14,875	11,427	20,309	3,777	8,622	6,517
Non-financial companies	31,969	40,411	45,247	45,114	8,298	13,250	9,033

Sources: CNMV and Banco de España.

1 The figures for commercial paper issues correspond to the amounts placed.

2 Data to 28 February.



The CNMV registered 19.96 billion euros of bond issues in the first quarter of the year, 22% down on the same period of 2017. The issue volume, which remains at low levels, is again explained by the lower financing needs of financial institutions, competition from traditional bank financing - with improved conditions in terms of price and volume - and continuation of foreign issuance by large companies. In absolute terms, the largest falls were recorded in bonds and debentures, which fell to less than half to stand below 5 billion euros. In contrast, the greatest growth was recorded in issues of mortgage covered bonds, which were almost three times higher. It is possible that the growth in these issues is the result of financial institutions choosing to take advantage of the facilities offered by the ECB before they disappear or become more restrictive<sup>28</sup>. Also noteworthy was an issue by Caixabank of perpetual preferred securities contingently convertible in an amount of 1.25 billion euros, which was aimed at institutional investors.

*The volume of fixed-income issues registered with the CNMV fell in the first quarter...*

Fixed-income issuance abroad by Spanish issuers in the first two months of the year was slightly higher than the same period of 2017 and amounted to almost 15 billion euros. The largest increase corresponds to commercial paper issues, which were three times higher, while long-term assets fell by half. In relative terms, the proportion of these issues stood at 46% of the total amount issued by Spanish companies in 2017 and the preliminary data of this year seem to indicate that their proportion of total issues will remain significant.

*... while those of Spanish issuers abroad grew once again, although largely concentrated in short-term debt.*

Finally, issues by subsidiaries of Spanish companies in the rest of the world rose by 30% on 2017 to 15.55 billion euros. Almost 60% of this amount corresponds to non-financial companies, while the rest corresponds to banks. In general, Spanish companies have continued to issue debt in anticipation of this route of funding becoming more expensive once the ECB starts to normalise its monetary policy.

## 4 Market agents

### 4.1 Investment vehicles

#### Financial CIS<sup>29</sup>

Assets managed by mutual funds rose by 11.5% in 2017 to 265.2 billion euros, thus consolidating the expansion that began in 2013 (see table 12). Almost 80% of this growth was due to subscriptions by investors, which rose in net terms to a cumulative figure of 21.34 billion euros over the year, of which 5.65 billion euros corresponded to the last quarter (see table 11). However, this performance was not seen in all fund categories. On the one hand, global funds recorded the best performance, with net subscriptions of 12.98 billion euros followed, at some distance, by mixed equity and International equity funds, whose net subscriptions stood at 5.51 billion

*The assets managed by mutual funds grew by over 11% in 2017, largely thanks to the high level of subscriptions by unit-holders, particularly in global funds and equity funds...*

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28 Although their volume is limited by the balance of outstanding mortgage loans, mortgage covered bonds benefit in their issue costs from the ECB's covered bond purchase programme (CBPP3).

29 Hedge funds and funds of hedge funds are financial CIS, but due to their specific features they are described in a separate sub-heading.

euros and 4.5 billion euros, respectively. Absolute return funds also recorded a high level of subscription, with a figure of 4.38 billion euros.

*... and despite the disinvestment in the most conservative categories.*

On the other hand, the largest net redemptions were recorded in passively-managed funds and fixed-income funds, with falls of 4.58 billion euros and 3 billion euros, respectively. In 2016, the assets under management in these two categories had recorded substantial growth thanks to a high level of subscriptions. Guaranteed fixed-income funds, following the downward trend of recent years, suffered net redemptions of 2.89 billion euros. It can therefore be inferred that investors once again took up the trend that began in 2013, and which was partially reversed in 2016, on choosing funds with a medium-high risk level to the detriment of more conservative funds, in the search for higher returns.

*The return on fund portfolios also had a positive effect on the increase in assets under management, as it reached 2.4%, being particularly high in the first quarter.*

The return on fund portfolios in 2017 also contributed to the growth in assets under management, as it rose to 2.42% compared with 0.98% in the previous year. In general terms, the first quarter saw the best performance, particularly in the case of mutual funds with a high proportion of equity in their portfolios thanks to the strong share price gains over said period. The funds with the highest returns were euro equity funds and international equity funds, with 11.16% and 8.75%, respectively. Only fixed-income funds ended the year with a negative return, in this case of -0.13%, with the lowest returns recorded in the last quarter (-0.08%).

### Net mutual fund subscriptions

TABLE 11

Million euros	2015	2016	2017	2017			
				I	II	III	IV
<b>Total mutual funds</b>	<b>23,466.6</b>	<b>13,782.4</b>	<b>21,338.4</b>	<b>6,266.4</b>	<b>5,968.3</b>	<b>3,458.6</b>	<b>5,645.1</b>
Fixed-income <sup>1</sup>	-5,351.4	7,613.8	-2,998.7	-1,952.6	-1,181.5	66.4	69.0
Mixed fixed-income <sup>2</sup>	21,167.5	-3,177.6	2,501.7	1,151.3	395.1	242.7	712.6
Mixed equity <sup>3</sup>	8,153.8	-3,030.2	5,509.6	1,529.4	1,679.7	810.2	1,490.3
Euro equity <sup>4</sup>	468.9	-542.9	2,544.9	397.9	957.7	646.3	543.0
International equity <sup>5</sup>	4,060.5	346.6	4,502.9	1,961.7	403.2	1,022.7	1,115.3
Guaranteed fixed-income	-6,807.4	-3,202.7	-2,890.0	-832.0	-778.5	-931.7	-347.8
Guaranteed equity <sup>6</sup>	-2,599.8	5,478.4	-588.4	844.6	-439.5	-454.4	-539.1
Global funds	5,805.3	3,579.9	12,984.3	3,350.4	4,353.3	1,641.8	3,638.8
Passively managed <sup>7</sup>	-6,264.2	5,790.0	-4,580.8	-1,181.4	-1,215.0	-734.2	-1,450.2
Absolute return <sup>7</sup>	4,811.4	946.4	4,378.9	997.0	1,793.8	1,148.9	439.2

Source: CNMV. Estimated data.

1 Includes: Euro fixed-income, international fixed-income and money market funds (from the third quarter of 2011, money market funds compass those engaging in money markets and short-term money market investments, Circular 3/2011).

2 Includes: Euro mixed fixed-income and International mixed fixed-income.

3 Includes: Euro mixed equity and International mixed equity.

4 Includes: Euro equity.

5 Includes: International equity.

6 Includes: Guaranteed equity and Partial guarantee.

7 New categories since II-09. All absolute return funds were previously classified under Global Funds.

The reduction in the supply of funds that began in 2013 due to the streamlining undertaken by management companies (the number of funds fell by 457 in four years) continued in 2017, although at a lower rate. The number of funds at the end of the year stood at 1,741, 64 down on year-end 2016. The largest fall, in line with the negative trend of recent years, was recorded in guaranteed fixed-income funds, with 43 fewer funds, followed by passively-managed and fixed-income funds, the number of which fell by 18 and 13, respectively. In contrast, the category that recorded the highest increase was that of global funds, with 22 more funds, thus extending the expansive trend of 2016, when the number of funds rose by 25. The number of international equity funds, mixed equity funds and mixed fixed-income funds rose by 10, 8 and 7, respectively.

*The number of funds continued to fall in 2017, dropping to 1,741, thus extending the downward trend that began in 2013, although at a slower rate than in previous years.*

In line with the trend in assets under management, the number of unit-holders in mutual funds rose by 24.6% to over 10.2 million at the end of the year. The largest increase was recorded in international equity funds, with 693,000 more unit-holders, followed by global funds and euro equity funds, with increases of 428,000 and 315,000, respectively. Guaranteed fixed-income funds, whose unit-holders have been falling gradually since 2013, when they numbered over 1 million, recorded the largest reduction in investors, with 118,000 fewer unit-holders, dropping to 190,000. Passively-managed funds also recorded a reduction in unit-holders, with 107,000 fewer, and, to a lesser extent, guaranteed equity funds, which recorded a reduction of 24,000.

*The number of unit-holders moved in line with assets under management and recorded growth of 25% in 2017 to over 10 million.*

With the provisional data from January this year, it seems that the upward trend in collective investment continues. The assets under management of mutual funds grew by 2.2% to over 270 billion euros in January, while the number of unit-holders increased to 10.5 million. The number of funds, however, remained fairly stable.

*The expansion of the mutual fund industry continued in the first month of 2018.*

## Main mutual fund variables\*

TABLE 12

Number	2015	2016	2017	2017			
				I	II	III	IV
<b>Total mutual funds</b>	<b>1,804</b>	<b>1,805</b>	<b>1,741</b>	<b>1,815</b>	<b>1,804</b>	<b>1,795</b>	<b>1,741</b>
Fixed-income <sup>1</sup>	319	306	290	296	299	294	290
Mixed fixed-income <sup>2</sup>	132	148	155	154	154	158	155
Mixed equity <sup>3</sup>	142	168	176	172	173	177	176
Euro equity <sup>4</sup>	109	112	111	114	112	113	111
International Equity <sup>5</sup>	200	201	211	209	212	210	211
Guaranteed fixed-income	186	122	79	111	100	90	79
Guaranteed equity <sup>6</sup>	205	198	188	201	197	190	188
Global funds	178	203	225	208	217	223	225
Passively managed <sup>7</sup>	213	220	202	218	212	213	202
Absolute return <sup>7</sup>	97	106	104	111	107	106	104
<b>Assets (million euros)</b>							
<b>Total mutual funds</b>	<b>222,144.6</b>	<b>237,862.2</b>	<b>265,194.8</b>	<b>247,279.3</b>	<b>253,581.1</b>	<b>258,466.2</b>	<b>265,195</b>
Fixed-income <sup>1</sup>	65,583.8	74,226.4	70,563.9	72,038.9	71,124.9	70,297.1	70,563.9
Mixed fixed-income <sup>2</sup>	44,791.8	40,065.6	43,407.0	41,468.7	41,777.8	42,668.4	43,407.0
Mixed equity <sup>3</sup>	21,502.9	16,310.6	22,386.7	18,159.5	19,831.4	20,754.6	22,386.7
Euro equity <sup>4</sup>	9,092.9	8,665.9	12,203.2	9,874.5	10,996.5	11,753.3	12,203.2
International equity <sup>5</sup>	17,143.2	17,678.8	24,064.6	20,687.1	20,994.3	22,445.3	24,064.6
Guaranteed fixed-income	12,375.6	8,679.8	5,456.7	7,694.5	6,858.1	5,828.2	5,456.7
Guaranteed equity <sup>6</sup>	9,966.6	15,475.7	15,417.5	16,418.9	16,183.3	15,909.7	15,417.5
Global funds	12,683.3	20,916.8	35,511.5	24,735.0	29,044.8	31,439.9	35,511.5
Passively managed <sup>7</sup>	17,731.1	23,601.6	19,477.8	22,701.7	21,601.5	20,972.4	19,477.8
Absolute return <sup>7</sup>	11,228.1	12,215.2	16,705.9	13,474.6	15,142.6	16,371.3	16,705.9
<b>Unit-holders</b>							
<b>Total mutual funds</b>	<b>7,682,947</b>	<b>8,253,611</b>	<b>10,287,454</b>	<b>9,332,934</b>	<b>9,569,922</b>	<b>10,068,296</b>	<b>10,287,454</b>
Fixed-income <sup>1</sup>	2,203,847	2,347,984	2,627,547	2,554,194	2,656,675	2,660,197	2,627,547
Mixed fixed-income <sup>2</sup>	1,130,190	1,043,798	1,197,523	1,169,480	1,114,668	1,154,688	1,197,523
Mixed equity <sup>3</sup>	612,276	448,491	584,408	485,795	533,200	552,773	584,408
Euro equity <sup>4</sup>	422,469	395,697	710,928	429,147	515,999	663,541	710,928
International equity <sup>5</sup>	1,041,517	1,172,287	1,865,367	1,505,724	1,547,970	1,790,875	1,865,367
Guaranteed fixed-income	423,409	307,771	190,075	273,188	239,787	205,956	190,075
Guaranteed equity <sup>6</sup>	417,843	552,445	527,533	576,664	560,146	542,772	527,533
Global funds	381,590	658,722	1,086,937	857,135	903,273	985,627	1,086,937
Passively managed <sup>7</sup>	554,698	746,233	638,966	723,472	697,071	673,604	638,966
Absolute return <sup>7</sup>	479,182	565,325	858,170	743,411	786,472	823,971	858,170
<b>Return<sup>8</sup> (%)</b>							
<b>Total mutual funds</b>	<b>0.89</b>	<b>0.98</b>	<b>2.42</b>	<b>1.35</b>	<b>0.16</b>	<b>0.56</b>	<b>0.33</b>
Fixed-income <sup>1</sup>	0.10	0.52	-0.13	-0.07	-0.03	0.05	-0.08
Mixed fixed-income <sup>2</sup>	0.16	0.27	1.10	0.58	0.02	0.38	0.12
Mixed equity <sup>3</sup>	0.15	1.19	3.23	1.95	-0.12	0.80	0.57
Euro equity <sup>4</sup>	3.44	2.61	11.16	8.57	2.06	0.55	-0.23
International equity <sup>5</sup>	7.84	4.15	8.75	5.67	-0.46	2.09	1.27
Guaranteed fixed-income	0.27	-0.03	0.72	-0.35	0.48	0.29	0.30
Guaranteed equity <sup>6</sup>	1.07	0.19	1.61	0.41	0.68	0.48	0.03
Global funds	2.45	1.99	4.46	2.08	0.07	0.94	1.31
Passively managed <sup>7</sup>	0.53	1.16	2.13	1.30	0.52	0.50	-0.20
Absolute return <sup>7</sup>	0.12	0.38	1.44	0.50	0.27	0.43	0.23

Source: CNMV.

\* Data for funds that have filed financial statements (i.e., not including those in the process of winding-up or liquidation).

- 1 Includes: Euro fixed-income, international fixed-income and money market funds (from the third quarter of 2011, money market funds compass those engaging in money markets and short-term money market investments, Circular 3/2011).
- 2 Includes: Euro mixed fixed income and International mixed fixed income.
- 3 Includes: Euro mixed equity and International mixed equity.
- 4 Includes: Euro equity.
- 5 Includes: International equity.
- 6 Includes: Guaranteed equity and Partial guarantee.
- 7 New categories since II-09. All absolute return funds were previously classified under Global Funds.
- 8 Annual return for 2014, 2015 and 2016. Quarterly data comprise non-annualised quarterly returns.

The liquidity conditions of the fixed-income portfolio, which had improved significantly between 2010 and 2014 and had remained relatively stable in 2015 and 2016, worsened slightly over 2017. The percentage of less-liquid assets in mutual funds in the last quarter of the year stood at 1.5%, 0.3 percentage points up on year-end 2016, rising from 2.96 billion euros to 3.93 billion euros. Despite this increase, these figures are very far from those recorded in 2009, when less-liquid assets accounted for almost 9% of total fund assets. With regard to their composition, there was a gradual increase in low liquidity assets in the fixed-income portfolio of financial institutions with a rating below AA, with an increase of 755 million euros in 2017, rising from 5.2% of total assets in the portfolio to 7%. The proportion of less-liquid securitisations also grew in 2017, by over 20 percentage points, rising from 73% of total securitisations at year-end 2016 to 93.8% (see table 13).

*The liquidity conditions of the fixed-income portfolio of mutual funds worsened slightly in 2017*

### Estimated liquidity of mutual fund assets

TABLE 13

Asset type	Less-liquid investments					
	Million euros			% total portfolio		
	Jun-17	Sep-17	Dec-17	Jun-17	Sep-17	Dec-17
Financial fixed income rated AAA/AA	39	28	22	5.1	4.0	3.5
Financial fixed income rated below AAA/AA	1,644	1,795	1,929	6.2	6.5	7.0
Non-financial fixed income	898	999	925	5.6	5.9	5.2
Securitisations	963	964	1,058	92.5	92.8	93.8
AAA-rated securitisations	120	100	84	100.0	100.0	100.0
Other securitisations	843	863	974	91.5	92.1	93.3
<b>Total</b>	<b>3,544</b>	<b>3,785</b>	<b>3,934</b>	<b>8.0</b>	<b>8.2</b>	<b>8.4</b>
<b>% of mutual fund assets</b>	<b>1.4</b>	<b>1.5</b>	<b>1.5</b>			

Source: CNMV.

### Real estate CIS

Despite the improvement in the construction and real estate sector since 2015, the key variables of real estate CIS worsened slightly in 2017.

*Real estate CIS continued suffering setbacks in 2017.*

Real estate funds, which were hit hardest by the effects of the crisis, shed 2.7% of their assets to end 2017 with 360 million euros. This contraction was caused by the negative returns suffered by real estate funds over the year, particularly in the second quarter, which in cumulative terms stood at -2.6%. Although these values are better than those recorded by these funds in the middle years of the crisis (a return of -11.3% in 2013), the recovery in the real estate sector has so far failed to work through to fund returns. The number of unit-holders fell significantly, specifically by 72%, with losses concentrated in the last quarter of the year. This fall was the result of the buyback of units by one fund owner from unit-holders that wished to sell. In December 2017, there was a total of 1,097 unit-holders, while the number of funds remained at three.

*Real estate funds continued to record falls in assets managed as a result of their negative returns...*

...while real estate investment companies recorded a fall in their assets as a result of de-registrations over the year.

The number of real estate investment companies, which had remained constant over the last two years, fell from six to four, after three de-registrations in 2017 (all of them in the last quarter) and one new registration. Assets managed by these companies fell by 10.7% to 631.5 million euros as a result of the aforementioned de-registrations. The number of shareholders fell by over 50%, dropping from 675 to 327.

### Hedge funds

In 2017, hedge fund assets grew by 32%, while the number of funds rose by seven.

Hedge fund assets grew substantially over the first eleven months of 2017, rising by 31.7% to 2.73 billion euros. By the end of the year, the number of funds that had filed statements with the CNMV stood at 55, compared with 48 in 2016, following eight new registrations and one de-registration. The increase was recorded in hedge funds, which rose from 41 to 47 (six new registrations) and in funds of hedge funds, which rose from seven to eight (two new registrations and one de-registration). In the case of the latter, this increase was the first after they had fallen consistently since the start of the crisis, when a total of 41 vehicles of this type were registered.

Pure hedge fund assets rose by 26% and their return by 7%...

Pure hedge funds recorded an increase in assets of 26.3% to stand at 2.24 billion euros at the end of November (see table 14), mainly as a result of the increase in the value of their portfolio. The return of these funds stood at 7.01% between January and November 2017 and was particularly high in the first quarter of the year (4.1%). Net subscriptions, in contrast, although still positive, were not particularly high (11.1 million euros), as they reflected the negative figure recorded in the second quarter. In the second half of the year, in contrast, net subscriptions amounted to 66.9 million euros, and the number of unit-holders rose by 22.2% to stand at 3,582.

### Main hedge fund and fund of hedge fund variables

TABLE 14

	2015	2016	2017 <sup>1</sup>	2017			
				I	II	III	IV <sup>1</sup>
<b>FUNDS OF HEDGE FUNDS</b>							
Number	11	7	8	8	9	9	8
Unit-holders	1,265	1,237	3,591	1,231	2,393	3,534	3,591
Assets (million euros)	319.8	293.7	482.7	293.2	327.0	472.0	482.7
Return (%)	6.16	0.90	-1.44	0.16	-2.04	0.36	0.09
<b>HEDGE FUNDS</b>							
Number	37	41	47	41	45	46	47
Unit-holders	3,089	2,930	3,582	3,080	3,308	3,444	3,582
Assets (million euros)	1,764.8	1,889.2	2,243.3	1,972.0	2,140.0	2,192.0	2,243.3
Return (%)	4.83	4.32	7.01	4.08	1.74	1.03	0.63

Source: CNMV.

<sup>1</sup> Data to November, except number of vehicles, which are shown to December.

In the segment of funds of hedge funds, which had recorded downturns in recent years, assets increased significantly (by 64.4%) to 482.7 million euros, as a consequence of the registration of two vehicles whose level of assets is high in relation to the others. For the same reason, the number of unit-holders almost trebled to 3,591 at the end of November. The return of these funds in the first eleven months of 2017 was negative (-1.44%), as they were dragged down by the poor performance in the second quarter (-2.04%), as in the other quarters the returns were all positive, although at very moderate levels.

... while the growth in funds of hedge funds was 64% even though their return was negative (-1.4%).

### Foreign UCITS marketed in Spain

The expansion of the foreign UCITS segment in Spain that began in the middle of 2012, and which levelled off slightly in 2016, continued vigorously in 2017. The assets managed by these UCITS grew by 30.8% last year (6.1% in the last quarter) to over 150 billion euros, practically five times more than at the end of 2012 (see figure 20). This amount accounted for 33.4% of total assets managed by CIS marketed in Spain, four percentage points up on year-end 2016.

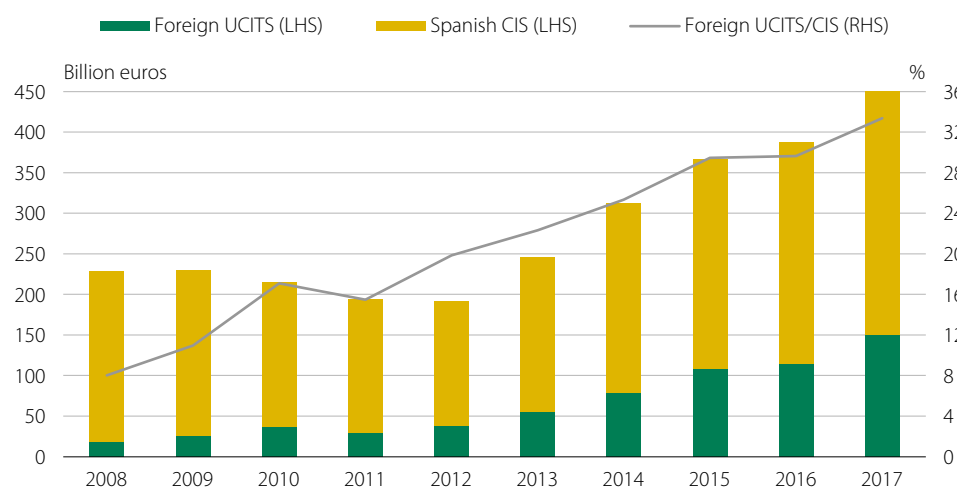
Expansion of foreign UCITS market in Spain, that began in 2012, continued vigorously in 2017: their investment volume amounted to 150 billion euros...

This increase in the investment in foreign UCITS was recorded both in funds and in companies, which are the entities with the highest level of assets. The assets managed by funds grew by 22.5% in the year as a whole, despite falling by 3.6% in the last quarter, to stand at 26.13 billion euros. The assets managed by companies grew by 32.7% over the year (8.3% between September and December) to 124.29 billion euros. In line with these results, the number of investors grew by 19.4% in the case of funds and by 29.5% of the case of companies, reaching a total of 2.23 million, 27.4% up on December 2016. The number of schemes grew in both cases, with 14 more funds and 58 more companies, with the year closing with a total of 1,013 vehicles (455 funds and 558 companies). As in previous years, most of the new registrations corresponded to undertakings from Luxembourg and Ireland. Five new funds were registered in the first quarter of the year, and hence at the end of February the total number of schemes stood at 1,018.

...and there are now over 1,000 vehicles, divided amongst funds (455) and companies (558).

### Assets of foreign UCITS marketed in Spain

FIGURE 20



Source: CNMV.

## Outlook

*Low interest rates and the growth in income favour the expansion of the collective investment industry. This sector, however, is not free from risks as it is particularly sensitive to moments of market turmoil.*

The expansion of the collective investment industry in 2017 confirms the upward trend that began in 2012, with sharp growth in assets that has continued into the first months of this year. The current context of low interest rates that practically cancel the returns on bank deposits - the main competitors of the schemes - is likely to continue fuelling the resources of the collective investment industry over the short to medium term, particularly in the medium and high-risk categories. The increase in the income of investors also plays in favour of the sector. However, it is important to consider the fact that unit-holders are on average taking on higher risk than they traditionally assume and it is therefore essential that their decision-making is the result of appropriate knowledge about the products purchased. This factor will be particularly relevant in the event of turmoil in the markets as this may lead to high redemptions in some fund categories.

## 4.2 Investment firms

### Broker-dealers and brokers

*The profit of broker-dealers and brokers rose by almost 10% in 2017 thanks to a gradual change in their sources of income.*

Broker dealers and brokers operated in more favourable conditions in 2017 than in previous years, particularly in the case of brokers. Even though these intermediaries only obtained 12% of the total income generated from the provision of investment services, in which credit institutions remain the most significant players, they were able to improve their profits by 9.8% in 2017. This was due to a gradual change in their business model, in which the traditional source of their main income (for order processing and execution) has been losing relative importance, while other lines of business, such as marketing CIS, portfolio management and investment advice, have been gaining importance.

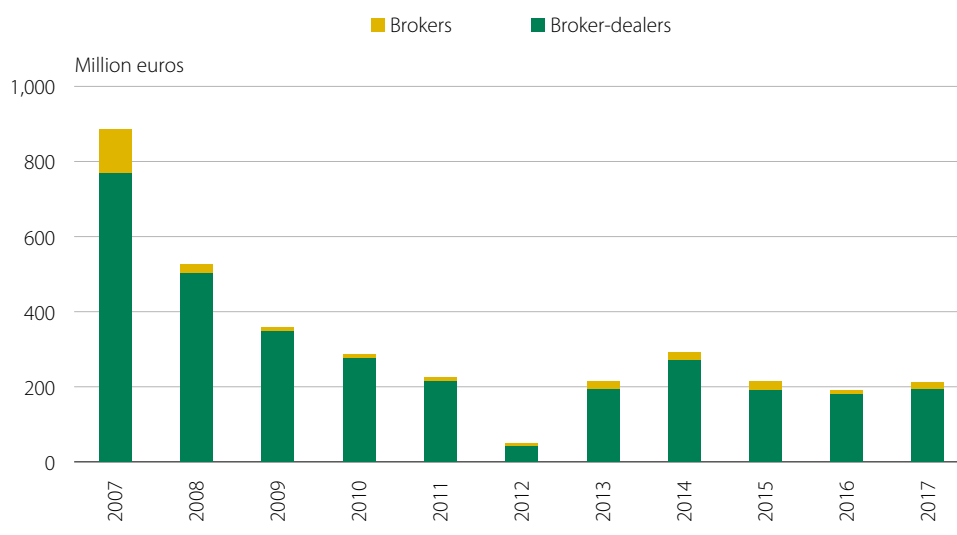
*A total of 89 entities were registered at the end of 2017, eight more than in 2016, thus reversing the contraction recorded in previous years.*

At the end of 2017, the CNMV's register contained a total of 89 broker-dealers and brokers, eight more than at the end of 2016 (nine new registrations and one de-registration). This increase breaks the downward trend of recent years, which was related to the adjustments undertaken in the sector (in 2008 there was a total of 101 entities). As usual, most entities provide services in the European Union under the free provision of services (46) and only five entities maintain branches in other countries. For their part, the number of foreign entities that provide investment services in Spain continued to grow in 2017, both under the free provision of services (rising from 2,793 to 2,833) and by means of a branch (from 46 to 53).



## Aggregate pre-tax profit of investment firms<sup>1</sup>

FIGURE 21



Source: CNMV.

<sup>1</sup> Except financial advisory firms and portfolio management companies.

Aggregate pre-tax profits of broker-dealers grew by 7.1% in 2017 to 194 million euros. The gross margin of broker-dealers fell slightly (by 0.3%) as the growth in net fee income (7.3%) was offset by the fall in net income from financial transactions (-61%). There was a gradual change in the importance of different types of financial services within fee income. Fees for order processing and execution, which remains the most important, fell by 11.4% in 2017, while fees from portfolio management, issue placement and underwriting and marketing CIS grew significantly (see table 15). The amount of income received for fees classified as “other” remained at similar levels to 2016 and accounted for 25% of total fees. This income is associated with ancillary services provided by broker-dealers.

Finally, the slight fall in operating expenses (of 2.8%) and depreciation/amortisation (44.8%) led to operating profit growing by 6.3% to 180 million euros.

As has been the case in recent years, a small number of firms generated most of the profits in this sub-sector. In particular, four broker-dealers accounted for 76.2% of total profit, a higher level of concentration than in previous years. Furthermore, over half of the broker-dealers recorded an increase in profits in 2017. However, despite the general improvement in profits, seven entities incurred losses, the same number as in 2016, although the volume of such losses was higher (14.7 million euros compared with 8.9 million euros in 2016). In general, it seems that the larger entities are increasingly more profitable, while the smaller firms are suffering greater difficulties.

*The profit of broker-dealers rose by 7.1% in 2017 to 194 million euros as a result of the increase in most of the fee income...*

*... and the fall in operating expenses.*

*The distribution of profits was uneven amongst entities as just four of them concentrated over 76% of total profit and the number of loss-making entities remained stable at seven.*

## Aggregate income statement (December 2017)

TABLE 15

Thousand euros	Broker-dealers			Brokers		
	Dec-16	Dec-17	% change	Dec-16	Dec-17	% change
1. Net interest income	53,930	58,545	8.6	903	3,127	246.3
2. Net fee income	373,552	400,884	7.3	108,111	120,194	11.2
2.1. Fee income	538,586	547,776	1.7	129,682	142,323	9.7
2.1.1. Order processing and execution	245,700	217,667	-11.4	24,181	20,459	-15.4
2.1.2. Initial placement and underwriting	5,955	17,553	194.8	3,193	3,427	7.3
2.1.3. Securities administration and custody	47,843	38,175	-20.2	603	924	53.2
2.1.4. Portfolio management	23,738	50,467	112.6	11,054	12,492	13.0
2.1.5. Investment advisory services	2,547	5,551	117.9	8,614	11,572	34.3
2.1.6. Search and placement	2,155	1,500	-30.4	40	0	-100.0
2.1.7. Market trading	0	0	-	0	0	-
2.1.8. Marketing CIS	75,505	81,225	7.6	50,504	59,398	17.6
2.1.9. Other	135,143	135,640	0.4	31,494	34,052	8.1
2.2. Fee expense	165,034	146,892	-11.0	21,571	22,129	2.6
3. Profit from financial investments	104,292	40,996	-60.7	245	1,139	364.9
4. Net exchange differences	-29,731	4,290	-	154	-578	-
5. Other operating income and expense	28,554	24,160	-15.4	-1,184	-1,128	4.7
<b>GROSS PROFIT MARGIN</b>	<b>530,597</b>	<b>528,875</b>	<b>-0.3</b>	<b>108,229</b>	<b>122,754</b>	<b>13.4</b>
6. Operating expenses	351,951	341,944	-2.8	95,142	103,052	8.3
7. Depreciation, amortisation and other charges	10,451	5,764	-44.8	2,891	2,783	-3.7
8. Impairment losses on financial assets	-1,304	963	-	56	-10	-
<b>OPERATING PROFIT (LOSS)</b>	<b>169,499</b>	<b>180,204</b>	<b>6.3</b>	<b>10,140</b>	<b>16,929</b>	<b>67.0</b>
9. Other profit (loss)	11,695	13,808	18.1	682	-163	-
<b>PROFIT (LOSS) BEFORE TAX</b>	<b>181,194</b>	<b>194,012</b>	<b>7.1</b>	<b>10,822</b>	<b>16,766</b>	<b>54.9</b>
10. Corporate income tax	40,673	37,633	-7.5	3,840	4,876	27.0
<b>PROFIT (LOSS) FROM CONTINUING OPERATIONS</b>	<b>140,521</b>	<b>156,379</b>	<b>11.3</b>	<b>6,982</b>	<b>11,890</b>	<b>70.3</b>
11. Profit (loss) from discontinued operations	0	-407	-	0	0	-
<b>NET PROFIT (LOSS) FOR THE YEAR</b>	<b>140,521</b>	<b>155,972</b>	<b>11.0</b>	<b>6,982</b>	<b>11,890</b>	<b>70.3</b>

Source: CNMV.

*Brokers are more specialised than broker-dealers and include a much higher proportion of independent entities.*

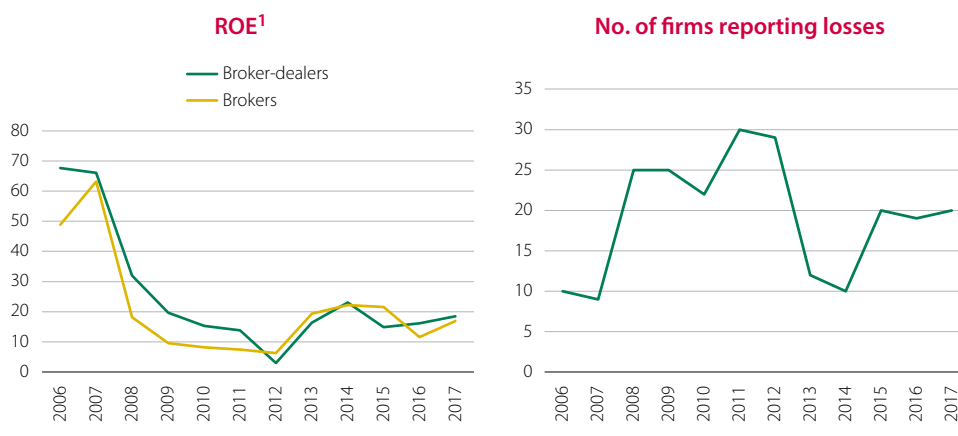
Brokers by definition may not invest on their own account and, therefore, their revenue almost exclusively comes from providing services to third parties. While some brokers obtain the bulk of their revenue from processing and executing orders, most tend to specialise in certain services, such as marketing CIS or portfolio management. In addition, unlike the case of broker-dealers, which are mostly controlled by a financial group, independent entities are much more important in this sector (27 out of 48).

Brokers' pre-tax profit rose by almost 55% in 2017 to 16.7 million euros as a result of the growth in most of the fees for providing financial services. The most significant growth was recorded in the headings of marketing CIS (17.6%), investment advisory services (34.3%) and portfolio management (13%). The only fees that fell were those for order processing and execution. These changes in fees, together with the 8.3% increase in operating expenses, led to an increase in operating profit of 67% to close to 17 million euros.

*Their aggregate profit before tax rose by around 55% in 2017 to 16.7 million euros as a result of the growth in most fees...*

**Pre-tax ROE of investment firms and number of loss-making firms**

FIGURE 22



Source: CNMV.

1 ROE based on profit before tax.

The increase in profits benefited a large number of brokers. Specifically, 67.5% of brokers recorded a growth in profits. However, the number of loss-making brokers increased from 11 in 2016 to 13 in 2017 and the volume of aggregate losses rose from 7.4 million euros to 7.95 million euros.

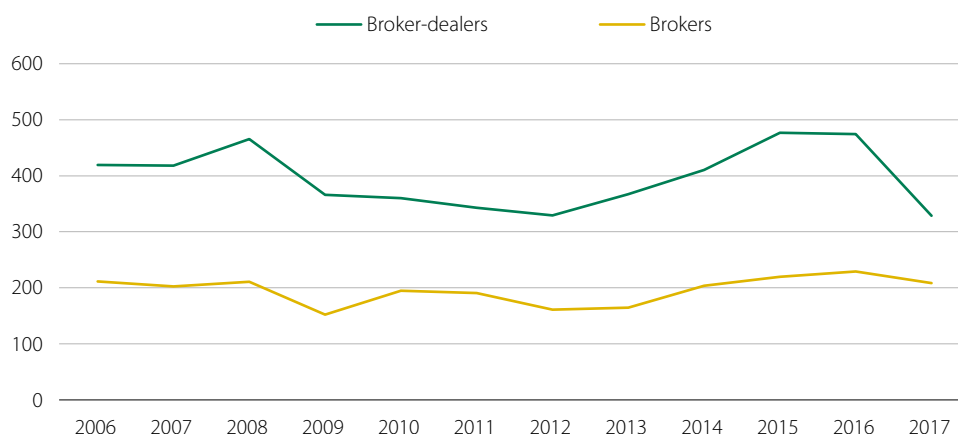
*... but the number of loss-making brokers rose from 11 to 13, and the aggregate volume of said losses also grew.*

The solvency levels of the sector remained high during 2017, although the values fell on the previous year. Accordingly, at the end of 2017, surplus capital was 3.2 times higher than the capital required compared with 4.5 times higher at the end of 2016. As usual, this margin was generally greater for broker-dealers than in brokers. While the capital adequacy ratio for broker-dealers was around 3.3, it remained at 2.1 for brokers. With regard to the distribution of this ratio, most broker-dealers continued to have surplus capital greater than 200%, while brokers recorded a wider range of figures. No broker-dealer or broker closed the year with a capital deficit, although, in the case of the latter, the gap provided by the equity capital was low as the amounts involved were not significant in absolute terms.

*Sector solvency conditions remained high in 2017, although surplus capital fell on 2016.*

## Investment firm capital adequacy (Surplus of eligible capital over minimum capital requirements, %)

FIGURE 23



Source: CNMV.

## Financial advisory firms

*The number of financial advisory firms rose in 2017 to 171, as did the assets under advice, which were 2% higher than in 2016.*

The operations of the financial advisory firms continued to grow in 2017, albeit at a slower pace than in previous years. Assets under advice rose by 2% compared with the figures for year-end 2016 and stood at 30.8 billion euros, more than double the figure recorded in 2012. As shown in table 16, the distribution of assets amongst the different types of clients shifted in favour of retail and professional clients. The former grew from accounting for 25.1% of assets under management to 29.1%, while the latter rose from accounting for 18.7% to 21.1%. In contrast, the importance relating to eligible counterparties<sup>30</sup> (under the heading of “Others”) fell by seven percentage points to 49.4%. The number of financial advisory firms also rose in 2017 from 160 at the end of 2016 to 171, following 16 new registrations and five de-registrations.

*...which led to an increase in fee income from clients and also from other entities.*

The management of a greater volume of assets meant that fee income rose by 22.4% in 2017 on the figure for 2016, to 63.7 million euros. Both fees received directly from clients and those corresponding to other entities rose in 2017, particularly the former, which grew by 25.1% to over 50 million euros. It is worth noting that 85% of the total amount of financial instruments included in the recommendations of financial advisory firms corresponded to CIS.

30 Eligible counterpart is the classification that MiFID typically gives banks, other financial institutions and governments, and is a category that requires a lower level of protection.

## Main financial advisory firm variables

TABLE 16

Thousand euros	2015	2016	2017	% change 17/16
<b>NUMBER OF FIRMS</b>	<b>154</b>	<b>160</b>	<b>171</b>	<b>6.9</b>
<b>ASSETS UNDER ADVICE<sup>1</sup></b>	<b>25,084,882</b>	<b>30,174,877</b>	<b>30,790,535</b>	<b>2.0</b>
Retail clients	6,499,049	7,588,143	9,096,071	19.9
Professional clients	5,108,032	5,654,358	6,482,283	14.6
Others	13,477,801	16,932,376	15,212,181	-10.2
<b>NUMBER OF CLIENTS<sup>1,2</sup></b>	<b>5,544</b>	<b>5,923</b>	<b>6,769</b>	<b>14.3</b>
Retail clients	5,156	5,510	6,320	14.7
Professional clients	319	327	355	8.6
Others	69	86	94	9.3
<b>FEE INCOME<sup>3</sup></b>	<b>57,231</b>	<b>52,534</b>	<b>64,289</b>	<b>22.4</b>
<b>Fee income</b>	<b>56,227</b>	<b>51,687</b>	<b>63,683</b>	<b>23.2</b>
From clients	45,625	40,717	50,925	25.1
From other firms	10,602	10,970	12,758	16.3
<b>Other income</b>	<b>1,004</b>	<b>847</b>	<b>606</b>	<b>-28.5</b>
<b>EQUITY</b>	<b>25,021</b>	<b>24,119</b>	<b>33,595</b>	<b>39.3</b>
Share capital	5,881	6,834	7,796	14.1
Reserves and retained earnings	7,583	12,123	13,595	12.1
Profit (loss) for the year <sup>2</sup>	11,481	7,511	11,875	58.1
Other own funds	76	-2,349	329	-

1 Period-end data at market value.

2 Pre-2015 figures refer to number of contracts.

3 Cumulative data for the period.

## Outlook

The outlook for non-bank financial intermediaries is generally positive despite the existence of several factors that entail challenges for the sector. One of the most important is related to the progressive contraction of the most important revenue traditionally received by these firms, i.e., that from trading on markets. This revenue is being affected by competition from credit institutions and by the shift from trading in Spanish securities to other markets and MTFs other than home markets. These trends have led to a shift in the business model of broker-dealers and brokers, which over recent years are building up business lines that were previously relatively unimportant. In this regard, CIS marketing, portfolio management services and investment advice are becoming increasingly important. A greater concern is the polarisation of the sector as it can be noted that entities with positive performance can continue improving over time, while those with worse results face greater difficulties in overcoming their situation.

*The medium-term outlook for financial intermediaries is positive as a whole, although they face significant challenges.*

### 4.3 CIS management companies

*In 2017, CIS management companies managed assets of around 300 billion euros, 10% up on the previous year...*

*... a fact that was reflected in aggregate profits, which grew by 26%. CIS management fees, the main source of income, rose by 13% due to the increase in both assets and the average management fee.*

*The number of management companies, following several years in which bank restructuring led to some de-registrations, increased in 2017 from 101 to 109.*

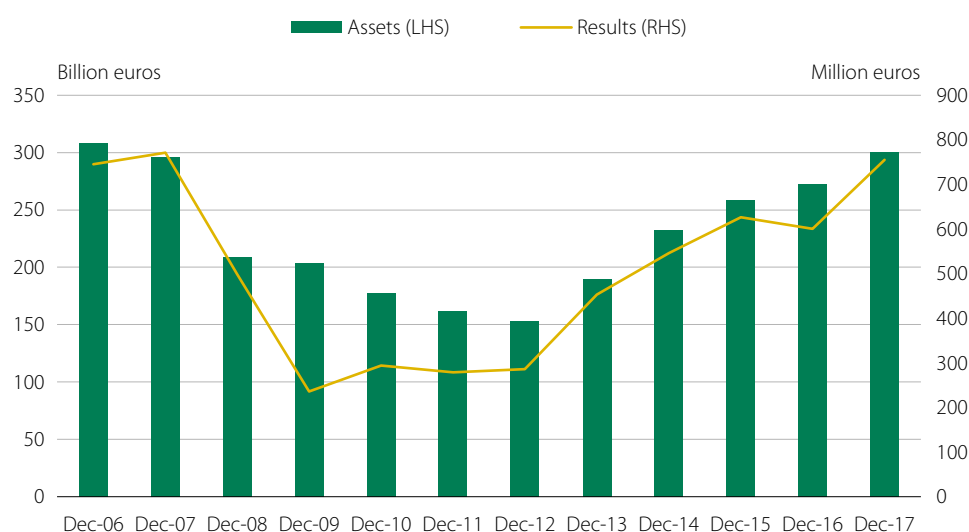
The assets under management by CIS management companies ended 2017 with an increase of 9.9% to stand at almost 300 billion euros. Following years of continuous falls, the growth trend that began in 2013 seems to have taken root (see figure 24). Almost all the growth was concentrated in mutual funds which, as stated, recorded growth in assets of over 11%. It is also important to highlight the level of concentration in the sector, which remained very high in 2017: at the end of the year, the three largest management companies had a joint share of 42% of total assets under management, a similar figure to year-end 2016.

In tandem with the growth in the sector's assets, aggregate profit before tax rose by 25.6% on 2016 to 754.6 million euros, mainly as a result of the increase in fee income, which stood at 2.98 billion euros. The largest increase was recorded in CIS management fees, which are by far the largest type of fees, with close to 300 million euros (a rise of 12.8%). This growth resulted from both the growth in assets managed by CIS management companies and a slight upturn in the average management fee, which stood at 0.89% of assets compared with 0.87% at the end of 2016 (see table 17). This increase was mainly the result of a shift of mutual fund assets to higher risk categories, which are generally associated with higher fees. In line with the improvement in the annual accounts, the return on equity (ROE) of CIS management companies as a whole rose from 55% at year-end 2016 to 73% in December 2017. The number of loss-making firms rose from 13 to 19. However, their aggregate loss fell by almost 1 million euros to 6.6 million euros.

Over 2017, there were nine new registrations of CIS management companies and one de-registration, which places the number of companies registered with the CNMV at 109. In the first two months of this year, two further management companies registered, bringing the total to 111. It may be concluded from this information that the sector's reorganisation process has come to an end.

**CIS management companies: Assets under management and pre-tax profits**

FIGURE 24



Source: CNMV.

## CIS management companies: Assets under management and CIS management fees and fee ratio

TABLE 17

Million euros	Assets under management	CIS management fee income	Average CIS management fee (%)	Fee ratio (%) <sup>1</sup>
2009	203,730	1,717	0.84	68.08
2010	177,055	1,639	0.93	67.24
2011	161,481	1,503	0.93	65.60
2012	152,959	1,416	0.93	64.62
2013	189,433	1,594	0.84	61.94
2014	232,232	2,004	0.85	61.80
2015	258,201	2,442	0.95	63.68
2016	272,906	2,347	0.86	61.67
2017	299,933	2,647	0.89	58.68

Source: CNMV.

<sup>1</sup> Ratio of fee expenses for fund marketing to fee income from CIS management.

## 4.4 Other intermediaries: Venture capital and crowdfunding platforms

### Venture capital

Since entry into force of Law 22/2014, of 12 November, 33 of the new types of vehicle had been created at year-end 2016, while 16 vehicles of this type were created in 2017, while one was deregistered, bringing the total to 48. Specifically, one SME venture capital fund, three European venture capital funds, four SME venture capital companies, one closed-ended collective investment fund and seven closed-ended collective investment companies were registered.

*25 of the new types of venture capital vehicles were created in 2017.*

With regard to traditional vehicles, 2017 ended with 13 new registrations and six de-registrations of venture capital funds, thus giving a total of 173, and ten new registrations in venture capital companies and four de-registrations, leading to a total number of 105. As a result of these movements, the total number of venture capital entities at 31 December (excluding closed-ended entities) was 311, compared with 291 at the end of 2016. On the same date, there was a total of 15 closed-ended vehicles, 13 companies and two funds, as well as 89 closed-ended investment scheme management companies (a term that includes the old venture capital management companies) following 11 new registrations and three de-registrations.

*The number of traditional vehicles also rose, resulting in the year ending with a total of 311 venture capital entities, 20 up on 2016.*

The 2017 data provided by the Spanish Capital, Growth and Investment Association (ASCRI) indicate that the sector grew sharply in the first nine months of 2017. Over the period there was a noteworthy return of large deals with the completion of 11 megadeals (in excess of 100 million euros), with a volume of 2.86 billion euros, accounting for 60% of the total volume. In part thanks to these large deals, 2017 ended with an investment volume of 4.9 billion euros in 679 investments. Middle market deals (between 10 million and 100 million euros) reached historic highs with a volume of 1.47 billion euros in 55 investments.

*The venture capital sector grew substantially in 2017, particularly thanks to megadeals, with total investment volume standing at 4.9 billion euros at the end of the year.*

## Movements in the venture capital entity register in 2017

TABLE 18

	Situation at 31/12/2016	New registrations	De- registrations	Situation at 31/12/2017
<b>Companies</b>				
Venture capital funds	166	13	6	173
SME venture capital funds	11	1	0	12
European venture capital funds	2	3	0	5
Venture capital companies	99	10	4	105
SME venture capital companies	13	4	1	16
<b>Total venture capital entities</b>	<b>291</b>	<b>31</b>	<b>11</b>	<b>311</b>
Closed-ended collective investment funds	1	1	0	2
Closed-ended collective investment companies	6	7	0	13
<b>Total closed-ended collective investment entities</b>	<b>7</b>	<b>8</b>	<b>0</b>	<b>15</b>
<b>Closed-ended investment scheme management companies<sup>1</sup></b>	<b>81</b>	<b>11</b>	<b>3</b>	<b>89</b>

Source: CNMV.

1 A name that now applies to both the old venture capital scheme management companies and the management companies of the new closed-ended investment schemes.

*Investments in seed and start-up phases accounted for most deals, although with a low volume. Private foreign investments accounted for over 70% of the total volume, with a record figure of 3.61 billion euros.*

By investment stage, the bulk of the deals were in venture capital (seed and start-up) with a total of 519 investments, amounting to an investment volume of 494 million euros. The most important role was taken by private Spanish funds, with 345 investments. Particularly noteworthy was the positive performance of fundraising by private national operators, which amounted to 1.86 billion euros, a little under the figure for the previous year, which exceeded 2 billion euros. Investment by private international investors amounted to a record figure of 3.61 billion euros. The volume of disinvestments estimated for 2017 grew by 85% to 3.48 billion euros in 317 operations.

*Public funds, through co-investment mechanisms, continue to be important for encouraging the raising of new funds.*

Particularly noteworthy was the initiative of the ICO, through the FOND-ICO GLOBAL venture capital fund which remains extremely important in raising funds from the private sector through co-investment: 28% of the new investment vehicles registered in 2017 had some link with the fund.

### Crowdfunding platforms

*Nine applications for crowdfunding platforms were submitted in 2017, a much lower figure than in 2016 (24) and 2015 (21).*

The number of applications from crowdfunding platforms over 2017 was considerably lower than in the previous two years, specifically a total of nine, compared with 24 and 21 in 2016 and 2015, respectively. This was due to the fact that, following publication of Law 5/2015, the bulk of the requests in 2015 and 2016 concerned platforms that were already operating as such and that had to adapt to the legislative requirements in order to be able to continue carrying on their business.

*At the end of 2017, there were a total of 21 platforms registered in the CNMV Register, eight of which were registered that same year.*

A total of eight platforms were registered in 2017, compared with 12 and one in 2016 and 2015, respectively. The CNMV Register contained a total of 21 platforms at the end of 2017. A total of four projects (one in 2016) were rejected and another four (seven in 2016) were withdrawn or deemed withdrawn in 2017. The key features of the registered platforms include:



- Eight are equity platforms, nine are lending platforms and four are mixed.
- Two are real estate platforms, one lending and the other mixed, and both were registered in 2017.
- 12 have their registered address in Madrid, five in Barcelona, two in Valencia, one in Soria and one in Santa Cruz in Tenerife.
- One lending crowdfunding platform and another equity crowdfunding platform, both registered in 2016, are controlled by foreign companies engaged in crowdfunding activities.
- Only one platform, registered in 2016, is a hybrid platform (it is authorised to act as a crowdfunding platform and as a payment institution).

The preliminary information received from the platforms on their activity over the first quarter of 2017 reveals that these entities raised 23.18 million euros, 13% more than all funding received in 2016, and that they obtained revenue of 816,000 euros, 25% up on the revenue of the previous year. The new platforms registered in that half-year accounted for 28% of the funds raised and 27% of the revenue. In addition, between January and June, the number of published projects amounted to 280 (487 in 2016 as a whole) and the number of investors stood at 7,494 (1,599 accredited investors and 5,895 non-accredited investors).

*These platforms raised 23 million euros in the first half of the year, 13% up on the figure for the whole of 2016.*

## Number of registered crowdfunding platforms

TABLE 19

Platform Type	2015			2016			2017			Cumulative total		
	Total	of which		Total	of which <sup>1</sup>		Total	of which <sup>1</sup>		Total	of which <sup>1</sup>	
		Madrid	Barcelona		Madrid	Barcelona		Madrid	Barcelona		Madrid	Barcelona
Equity	1	1	0	4	3	1	3	0	2	8	4	3
Loans	0	0	0	8	4	2	1	1	0	9	5	2
Mixed	0	0	0	0	0	0	4	3	0	4	3	0
<b>TOTAL</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>12</b>	<b>7</b>	<b>3</b>	<b>8</b>	<b>4</b>	<b>2</b>	<b>21</b>	<b>12</b>	<b>5</b>

Source: CNMV.

<sup>1</sup> In addition, one crowdfunding platform with registered address in Soria and another in Valencia were registered in 2016. In addition, one crowdfunding platform with registered address in Santa Cruz de Tenerife and another in Valencia were registered in 2017.



## II Reports and analysis



**From *Homo economicus* to *Homo humanus***  
**Brief introduction to behavioural economics**

**María Eugenia Cadenas Sáez (\*)**

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*Recognizing where we depart from the ideal is an important part of the quest to truly understand ourselves, and one that promises many practical benefits. Understanding irrationality is important for our everyday actions and decisions, and for understanding how we design our environment and the choices it presents to us.*

Dan ARIELY  
*Predictably irrational, 2008*





# 1 Introduction

Since its beginnings, traditional economic theory has been concerned with the manner in which individuals make their investment, saving and spending decisions. To do this, it has started from the premise that individuals know what they want and use the information available in order to achieve their objectives and perfectly understand the risks and benefits of their financial choices. However, numerous discoveries made over recent years about how the human brain works from disciplines such as psychology, neurology and neurophysiology reveal that this is not always the case and that people are often unaware of their preferences, use the available information incorrectly and do not have a good understanding of the risks assumed.

Behavioural economics specifically studies this situation, i.e., human behaviour observed in the real world, in order to use this as a basis for more accurate and practical economic models than those provided by conventional economic theory. Consequently, behavioural economics takes into account every factor, whatever its nature, underlying financial decisions. This discipline attempts to analyse the patterns and biases of people's behaviour and to predict behaviour models.

Behavioural economics has gained special relevance with the recent award of the Nobel Prize in Economics to the economist Richard H. Thaler and, in 2002, to Daniel Kahneman, Professor of Psychology at Princeton University. What both authors emphasise is, in essence, that individuals are not fully rational beings and that this bounded rationality affects market behaviour.

Although the fact that individuals are not fully rational beings has been well-known for a long time in other fields such as psychology and advertising, it is a new development that economics is starting to take sociological, anthropological and psychological aspects into account when explaining how markets function and how investors behave.

The neoclassical economic paradigm is based on three theoretical features that are rarely observed in the real world: (i) the unbounded rationality of investors; (ii) their full ability to process all relevant information in an efficient and unbiased manner, and (iii) market efficiency, i.e. the fact that markets collect all available information and that there is a balance between return and risk. Behavioural economics deviates from this paradigm. People do not always make their decisions rationally, taking into account costs and benefits, but rather they often take into account social norms and expectations and follow patterns of cooperation. Their preferences depend on the context in which they find themselves and their own mental models. The human mind does not work like a computer, but is instead affected by psychological and social factors when making decisions.

This article offers a brief overview of the leading authors in behavioural economics and a list of the main premises on which this discipline is based in order to end by offering some examples of its practical application.

## 2 Leading exponents of behavioural economics

Although behavioural economics has generated more interest in recent years, its original foundations can be found in the work of the economist Adam Smith, particularly in *The Theory of Moral Sentiments* (1759). This work has been the starting point for numerous economists to explore the psychological factors involved in people's decision-making processes.

For his part, John Maynard Keynes, in his *General Theory of Employment, Interest and Money* (1936), highlights the importance of the psychology of the individual and of society, of human behaviour, of hope, fear and desire and sentiment as factors that might influence consumption patterns.

In the second half of the 20th century, economics started to focus on obtaining a more realistic understanding of human behaviour. In this regard, Herbert Simon, an American economist, political scientist and social scientist theorist is considered the creator of behavioural economics. In 1978, he was awarded the Nobel Prize in Economics for “pioneering research into the decision-making process within economic organisations and modern business economics and administrative research are largely based on Simon's ideas.” In 1947, in contrast with the concept of *Homo economicus*<sup>1</sup>, based on an individual who seeks to optimise their decisions, i.e., choose the best available option, he developed the definition of the “administrative man”, who seeks to choose the most satisfactory option. Simon starts from the idea that most human decisions, whether individual or organisational, are related to the discovery and selection of satisfactory alternatives. Only in exceptional cases are these decisions related to the discovery and selection of optimal alternatives.

Likewise, in 1957 Simon coined the term *bounded rationality* to emphasise that actual choices are different from economically desirable choices. With his concept of bounded rationality, Simon refers to a more realistic concept of the ability of human beings to make decisions. Given that individuals have limited cognitive ability, time and information, they seek out alternatives so as to avoid bad decisions and choose satisfactory actions.

In “Maps of bounded rationality: Psychology for Behavioral Economics”, the positivist psychologist Daniel Kahneman reviewed the work started in the 1970s and focused on drawing up a “map of bounded rationality”. Together with Amos Tversky, a cognitive psychologist, Daniel Kahneman developed three different research programmes. In the first, he explored the heuristics used by people when making decisions in the context of uncertainty and the usual biases involved in this process. The second programme focused on prospect theory, which is presented as an alternative

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1 Term coined by Adam Smith in *The Wealth of Nations* (1776).

to the expected utility theory and a choice model that combines the utility factor with other cognitive factors, such as reference points, variable sensitivity and loss aversion. The third line of research refers to framing effects and their implications on rational agent models, i.e., on the manner in which the choice opportunities are presented and how said presentation influences decision-making.

The economist Richard Thaler, referred to above, has made important contributions to the field of behavioural economics, mainly in the development of the bounded rationality concept and the manner in which social preferences and lack of self-control affect individuals' decisions and market results. The Nobel Prize committee, when referring to Richard Thaler, highlighted that, "by incorporating new insights from human psychology into economic analysis, he has provided economists with a richer set of analytical and experimental tools for understanding and predicting human behavior." This author has published numerous works on the subject, some of an informative nature, which will be referred to throughout this article.

In addition to the above-mentioned authors, behavioural economics builds on the work of other important researchers in this field, such as George Akerlof and Robert Shiller, both Nobel Laureates in Economics in 2001 and 2013, respectively, who made notable contributions to studying the "herd effect"<sup>2</sup> and Robert Lucas, also winner of the 1995 Nobel Prize in Economics, who focused his research on the implications of the assumption of the rational expectations theory.

As can be seen, behavioural economics arises as a response to the challenges posed by various psychologists and economists in view of the shortcomings of neoclassical economic theory when establishing a model that fits the decisions made by investors. However, behavioural economics is much more than psychology. It seeks to build economic models that help to explain observed human behaviour by taking into account social context and norms, history and culture. Some of the premises used by behavioural economics to configure this new decision-making model are presented below.

### 3 Premises of behavioural economics

As mentioned above, behavioural economics aims to develop economic models that are closer to reality so that they will be more reliable, accurate and practical.

In this regard, this discipline does not arise as a counterpoint to conventional economic theory, but rather as a complement that enriches it by providing knowledge from psychology, neurosciences, anthropology and sociology. Behavioural economics therefore replaces the rational agent, *Homo economicus* or *econo*<sup>3</sup>, who has clear preferences and maximises his own utility above any other consideration, with an individual whose choices are influenced by his/her own biases of thought and

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2 The herd effect is the tendency to imitate the actions of others in the belief that they are adopting the right behaviour. This bias occurs in situations where the individual does not have a clear idea of how to behave and is guided by the behaviour of others, assuming they have more knowledge.

3 Term coined by Richard H. Thaler.

emotion. This contribution of behavioural economics provides economists with a new perspective to better understand individuals' economic behaviour.

One of the key elements of behavioural economics is that it builds this new perspective based on realistic assumptions that contrast with the theoretical assumptions widely accepted by traditional economists. In essence, in contrast to the unlimited cognitive ability of *Homo economicus*, the individual on whom behavioural economics is based does not have an unlimited capacity for calculation or all the information required to perfectly be aware of the implications of each one of the available options and only aspires to make the most satisfactory decision, which is not necessarily the one that maximises his/her benefit.

Some of the premises on which behavioural economics is based are as follows:

- An individual's preferences change and vary over time.

According to conventional economic theory, an individual's preferences are stable and consistent. They do not change over time. Therefore, an individual that prefers option A to option B will never modify their choice.

Behavioural economics argues that practical evidence shows that individuals' preferences change. As an example, an individual may opt not to save for their retirement when they are young but change their mind as the retirement date approaches.

When preparing more accurate and reliable economic analyses, it will be necessary to bear in mind the fact that an individual's preferences may change and the reason for this may change. In the above example, considering that preferences are not stable or consistent may help to adopt measures to encourage saving or to raise awareness of the importance of saving at certain ages.

- Individuals' decisions are influenced by the social environment.

Conventional economic theory considers that individuals' preferences are not influenced by their own record of decision-making or by external factors, such as social conventions, their environment or the media.

In contrast, behavioural economics starts from the premise that human beings are social beings that make decisions in the framework of a social context that has a decisive influence on the final decision adopted.

- Individuals are 'satisficers'.

Conventional economic theory maintains that individuals are maximisers when making decisions, i.e., they seek to obtain the maximum utility in their decisions. The maximising individual compares all the possible options in order to choose the optimal one. To do this, the maximising individual should have unlimited information processing capacity, something which seems to be far removed from the reality of human nature.

Behavioural economics advocates the figure of the satisficing individual. Put simply, individuals lack the aforementioned unlimited information processing capacity and

choose to make the most satisfactory decision bearing in mind their cognitive limitations and environmental influences. The satisficing individual is on the path to maximisation, but is content to make a sufficiently good decision, even if it is not necessarily the optimal one.

- Individuals lack perfect knowledge when making decisions.

Conventional economic theory states that, when making decisions, individuals have access to all the relevant information, are aware of the consequences of their decisions and will not change in the future the decisions they make in the present.

In contrast with this premise, behavioural economics believes that individuals make decisions based on limited information as they lack the time and ability to access all the available information and to analyse it. For this very reason, individuals are not able to undertake an in-depth analysis of the consequences of their decisions and what the future holds for them. Finally, as mentioned above, evidence shows that decisions may vary over time.

- Individuals have bounded rationality.

Herbert Simon coined the term “bounded rationality” to refer to a model of rational behaviour in which individuals’ rationality is conditioned by emotion and by their own cognitive and time restrictions for analysing all the information relating to a decision.

This concept contrasts with the traditional consideration that individuals are able to process all the information and perform all the calculations necessary to adopt the optimal decision. Reality shows that this is clearly not the case.

In this context, behavioural economics has shown that individuals use heuristics or rules of thumb in the decision-making process that allow said process to be efficient, effective, quick and satisfactory. Heuristics help reduce the complex task of assessing options to a much simpler operation. Heuristics are very useful, but they can lead to severe and systematic mistakes, also known as cognitive biases. In this regard, Dan Ariely, in his book *Predictably Irrational* (2008), states that these mistakes are not only commonly made when making decisions, but that the same types of mistakes are almost always made. The author believes that the fact that bounded rationality is predictable is a consolation, because if it is predictable it can be controlled and counteracted and tools can be designed to help correct this intrinsic deficiency.

- Individuals are emotional beings.

Unlike conventional economic theory, which believes that the decision-making process is based on a careful analysis and calculation of all the available options, behavioural economics believes that emotions and intuition play a fundamental role in this process.

In this context, brain research has demonstrated that the decision-making process requires a little more than conscientious deliberations. In this regard, Daniel Kahneman, in his work *Thinking, fast and slow* (2011), distinguishes between two thought systems: System 1 (fast thinking), which operates in a fast and automatic way with little or no effort and without a feeling of voluntary control, while System 2 (slow thinking) is

focused on mental activities that require effort, including complex calculations. The two systems interact and are always active. System 1 constantly makes suggestions to System 2 in the form of impressions, intuitions, intentions and sensations. If approved by System 2, impressions and intuitions become beliefs and impulses become voluntary actions. Both systems generally work without any complications such that System 2 accepts the suggestions of System 1. Only when System 1 encounters a difficulty does it turn to System 2 to suggest a more detailed and accurate procedure that might solve the problem. This splitting up of the work between both systems minimises effort and optimises execution. System 1 works adequately; its short-term predictions are usually appropriate and its initial responses are quick and generally right. However, this system has biases, i.e., systematic errors that are usually committed in specific circumstances. System 2, on the other hand, is a slow process that uses a lot of energy.

This duality in the manner of thinking has been studied and systematised for decades in the field of psychology, for example by Keith Stanovich and Richard West, although it was already known, or its existence at least suspected, in Antiquity<sup>4</sup>. Essentially, decision-making is influenced by a way of thinking based on emotions and intuitions, which produces quick and automatic responses, and a more rational way of thinking, which focuses attention on the mental activities that require it.

Most daily decisions are made by System 1 with reasonably good results, except for the biases or errors that might arise. System 2 only acts to solve difficult issues that require critical analysis and ability. Consequently, Kahneman's research shows that the rational agent model does not provide a good description of human beings and that their decisions are affected by "the quirks of System 1 and the laziness of System 2".

- The framing of the options is important.

According to conventional economic theory, the framing of the options and opportunities presented should not affect individuals' decision-making. The choice of the best option should not be sensitive to the manner in which the options are framed and, therefore, should be independent from the context in which it is made. Given that individuals are endowed with unbounded rationality, they should be able to make their decisions without being influenced by the context.

However, behavioural economics believes that the context in which individuals make choices affects the way in which the options are viewed. If the framing is changed, the choices made by individuals may change. This is particularly important because the framing may bias individuals' preferences or distort their perspective, leading them to make the wrong decision.

- Incentives and the institutional context are fundamental.

The role of financial incentives is fundamental both in conventional economic theory and in behavioural economics as said incentives clearly affect decision-making.

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4 The dichotomy between reason and emotion has been analysed by numerous philosophers and thinkers. By way of example, we can see, among many other works, *The Republic* by Plato, Aristotle's *Rhetoric*, Descartes' *Passions of the Soul*, or *Ethics Demonstrated in Geometrical Order* by Spinoza.

The institutional context of the society in which individuals make their decisions, which is made up of the system of government, the legal system, its institutions and their quality, in turn affects the establishment of financial incentives and, therefore, this context will also ultimately influence decision-making.

The institutional context is highly important for understanding the economy. In this regard, the economy is the result of human interactions and that field of interaction is the result of the prevailing institutional framework. Economic relations will therefore be conditioned by what is permissible, i.e., by what the institutions in a particular place allow economic agents to do. In this regard, the economist Douglass North, winner of the Nobel Prize in Economics in 1993 and promoter of New Institutional Economics, said that, “in the jargon of the economist, institutions define and limit the set of choices of individuals” (North, 1990).

Consequently, behavioural economics and, to a lesser extent, conventional economics take into account the role of institutions as drivers or brakes on individuals’ decisions. Some ways in which institutions intervene to promote certain behaviour in individuals or the adoption of specific choices are analysed below.

## 4 Practical application of behavioural economics

Among other things, behavioural economics has contributed towards making the limitations of the neoclassical economic paradigm evident. The questioning by behavioural economics of the assumptions accepted by said paradigm, such as individuals’ full rationality or their unlimited capacity to process information, acts as the basis for configuring the new classification of an imperfect economic agent, influenced by psychological, anthropological and social factors.

Findings made in the context of behavioural economics are starting to become a resource for understanding how the aggregate feelings of individuals affect markets and, therefore, the manner in which the market reflects the aggregation of investors’ heterogeneous judgements, biases and cognitive errors. There are currently three main lines of research in this field<sup>5</sup>. The first of these concerns the influence of sentiment on the mean-variance relation (Yu and Yuan, 2011). When sentiment is low (pessimism), investors are more averse to volatility and tend to demand higher returns per unit of risk borne. At times of high sentiment (optimism), the balance between return and risk is less demanding. The second line of research suggests that sentiment contains useful economic information that might affect the return on shares. The third line argues that sentiment can induce investors to engage in herd or imitating behaviour (herd effect).

The main practical application resulting from the discoveries of behavioural economics, which are essentially based on studying this imperfect economic agent, is their incorporation into regulatory analysis, i.e., the debate on public policies in general and investor protection in particular. The new approach provided by this

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5 In this regard, see the study by Natividad Blasco and Sandra Ferrerueta.

discipline is very useful for financial market regulators because it provides a new multidisciplinary way to understand the economy and, ultimately, financial consumers. In turn, this deeper knowledge of individuals may facilitate the design of policies that are more effective for investor protection.

Some of the mechanisms for designing such policies are set out below. These mechanisms have a very broad scope of application, from environmental protection to organ donation. That is why they should be described in general terms and not limited to any specific field. However, it should be mentioned that all of them may be used for designing policies aimed at investor protection.

## Nudging

Generally speaking, there are several ways in which behavioural economics might be incorporated into the development of regulatory policies. One of them – perhaps the best known, thanks to the famous book by Richard Thaler and Cass Sunstein *Nudge: Improving decisions about health, wealth, and happiness* (2008) – is the use of nudges, i.e., strategies to push the population to make decisions that benefit it in the long term. According to the authors, a nudge is any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not mandates.

Richard Thaler and Cass Sunstein state that research undertaken in the field of decision-making raises serious doubts about the rationality of many human judgments and decisions and that human beings have a great tendency towards inertia (laziness). This tendency may be taken advantage of in order to encourage individuals to choose the most appropriate option that will provide them with the greatest welfare. According to Thaler and Sunstein, individuals tend to make the choice that requires the least effort or the path of least resistance. This tendency toward inertia will be reinforced or exploited if the default option is the recommended action.

Richard Thaler and Cass Sunstein propose the deliberate design of choice architecture as a tool to improve the decisions of individuals and minimise errors resulting from recurrent cognitive biases in decision-making. In order to carry out this design, the authors believe it is necessary to bear in mind a series of basic principles:

- Design default options.

As mentioned above, individuals have a strong tendency towards inertia or *status-quo* bias. This tendency may be taken advantage of when designing default options such that these options will be the most beneficial for the individual.

Thaler and Sunstein argue that these kinds of options are very powerful and that many organisations have discovered their effectiveness. A trivial example of applying the default option is the automatic renewal of subscriptions to publications. Another very recent and more important example is the adoption by Denmark of a presumed consent system for organ donation, i.e., every citizen is a potential donor and therefore organ donation becomes the default option.



- Expect error.

According to Thaler and Sunstein, “humans make mistakes. A well-designed system expects its users to err and is as forgiving as possible.”

The authors give numerous examples of this aspect. Automobiles are one such example. Automobile design is increasingly tolerant of error, which is why they are equipped with an automatic switch for the headlights, seatbelt warnings, etc.

- Give feedback.

An important element when encouraging certain decisions is to give feedback. According to Thaler and Sunstein, the best way to help humans improve their performance is to provide feedback. Well-designed systems tell people when they are doing well and when they are making mistakes. As an example, Thaler points out the warning emitted by mobile phones when they have a low battery.

- Understanding “mappings”: From choice to welfare.

According to these authors, a good system of choice architecture helps people improve their ability to map and hence to select options that will make them better off. One way to do this is to make the information about various options more comprehensible.

Thaler and Sunstein point out credit cards as an example. They believe that it is difficult to know how much it costs to use them because of the different associated fees and interest and the lack of transparency and comprehensibility with which they are presented to consumers. They therefore indicate that it is difficult for consumers to map the relationship between choice and welfare. In order to mitigate this difficulty, the authors propose the RECAP system (Record, Evaluate, and Compare Alternative Prices), which entails the different service providers informing customers about the rates/fees that they apply in a clear and transparent manner, thus allowing the customer to easily compare the prices of said services. The government would not regulate how much issuers could charge for services, but it would regulate their disclosure practices.

- Structure complex choices.

According to Thaler and Sunstein, people adopt different strategies for making choices depending on the size and complexity of the available options. When facing a small number of alternatives, the tendency is to examine all the attributes of all the alternatives and then make trade-offs when necessary.

However, when the choice set gets large, alternative strategies tend to be employed, causing serious problems. In this case, simplifying strategies are usually adopted. Consequently, as the alternatives become more numerous and complex, the choice architecture needs to take into account more factors and it is much more likely to influence the choices eventually made by the individual. The authors use the example of Netflix or Amazon: the choice architecture established by these companies is immensely helpful for customers to choose the product that best adapts to their tastes and preferences.

- Create incentives and make them visible.

Choice architecture must take into account the appropriate incentives and focus on making them visible. In many cases, individuals facing a choice do not see the incentives of the various options. Thaler and Sunstein cite several examples of how the visibility of incentives can influence a choice. These include the possibility of a home thermostat system that announces the saving per hour of lowering the temperature a few degrees. The authors believe that this action would probably have more effect on behaviour than raising the price of electricity.

A heated debate has arisen relating to the use of nudges and the choice architecture proposed by Richard Thaler and Cass Sunstein that revolves around the philosophy of libertarian paternalism. Thaler and Sunstein consider it legitimate for choice architectures to attempt to influence people's behaviour to make their lives longer, healthier and better. They are therefore in favour of institutions, both from the private sector and from government, making a conscious effort to guide people's decisions in directions that improve their lives. Both authors argue that people should be free to do what they want and that it is possible to combine a certain dose of paternalism with freedom of choice, that is, to influence their behaviour while respecting that freedom. Libertarian paternalism thus seeks to guide people in directions that will eventually improve their lives through a particular choice architecture and the use of nudges.

Libertarian paternalism seeks to *direct* an individual to the choices that he/she would make if he/she were perfectly rational and could analyse all the available information and had full self-control. This current of thought is clearly not free from criticism, mainly based on the legitimacy of the State to correct the behavioural biases and bounded rationality of the common man and, in the event this legitimacy is accepted, in what issues and to what extent this correction should be applied. In addition, the detractors of this theory believe that accepting the thesis of libertarian paternalism would mean attributing to regulators the perfect rationality that is denied to the average individual when making decisions. If bounded rationality is a feature that affects every individual, it is also a predictable feature of regulators themselves. This aspect has been the subject of various studies showing that scientists, researchers and experts are not exempt from the influence of cognitive biases (Kahan, 2013). The debate is undoubtedly underway.

Nevertheless, Libertarian paternalism has attracted the attention of politicians from across the political spectrum, particularly in the United Kingdom and South Korea. By way of example, the British Government has created the Behavioural Insights Team, whose mission is to apply behavioural sciences to help the Government to achieve its targets and in which Richard Thaler has been involved as an adviser.

### **Development of frameworks**

Another way to incorporate the findings of behavioural economics into regulatory policies is to create so-called frameworks, which are a practical way to undertake interventions that encourage an effective change in behaviour without the need for a detailed understanding of behavioural economics.

Researchers in behavioural economics have developed a considerable number of frameworks, whose application extends to such diverse fields as public health, the environment and marketing. In addition, the International Organization of Securities Commissions (IOSCO) and the Organization for Economic Cooperation and Development (OECD) have addressed this issue extensively and have developed frameworks that are particularly applicable to investor education and to increasing financial capabilities; in short, to investor protection<sup>6</sup>. The premise of this work is that the capabilities might not only be improved by education, but also by directly influencing investors' attitudes and behaviour. In this regard, IOSCO has recognised that influencing the attitudes and behaviour of retail investors is more effective than providing them with information to improve their knowledge. This body is therefore currently working hard to identify the methodologies and approaches that will help to improve the individual's financial capabilities.

Selecting an appropriate framework for designing effective techniques for changing behaviour requires taking into account a broad set of contextual factors and should be linked to a coherent behaviour system that is able to conceptualise the causal associations among its components. Two of the best-known frameworks will be briefly presented below. They aim to be a simple and practical instrument to help policymakers reflect on and implement behavioural changes and put them into practice. Both models have been developed by the aforementioned Behavioural Insights Team.

- MINDSPACE

This is a checklist of influences on individual behaviour that should be taken into account by regulatory authorities when carrying out their duties. As shown below, the model's name works as an acrostic of the checklist:

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### Influences on individuals' behaviour according to MINDSPACE

<b>M</b> Messenger	We are heavily influenced by who communicates information.
<b>I</b> Incentives	Our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses.
<b>N</b> Norms	We are strongly influenced by what others do.
<b>D</b> Defaults	We "go with the flow" of pre-set options.
<b>S</b> Salience	Our attention is drawn to what is novel and seems relevant to us.
<b>P</b> Priming	Our acts are often influenced by sub-conscious cues.
<b>A</b> Affect	Our emotional associations can powerfully shape our actions.
<b>C</b> Commitments	We seek to be consistent with our public promises, and reciprocate acts.
<b>E</b> Ego	We act in ways that make us feel better about ourselves.

Source: Halpern *et al.*, 2010.

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<sup>6</sup> See the joint document prepared by IOSCO and the OECD *The application of behavioral insights to financial literacy and investor education programs initiatives*, which will be published soon.

The authors insist that MINDSPACE helps policymakers better understand the behavioural dimension of the rules and actions they design. In particular, it can help them to understand how they might improve their attempts to modify behaviour, for example by understanding how people react to incentives. The creators of this model believe that if policymakers are trying to mould behaviour, they should do so as effectively as possible.

Although this model has been criticised by some authors, who believe it to be inconsistent given that it mixes characteristics of the receivers (ego) with regulatory strategies (default) or with how information is provided (messenger), the fact is that MINDSPACE offers a simple way of taking into account the main factors that influence behaviour when certain interventions are designed.

- EAST

EAST is a methodological framework that has been developed based on the experience obtained on applying behavioural sciences to public policy over recent years. This framework complements MINDSPACE by focusing more on how to apply behavioural insights in practice.

This methodology sets out principles for influencing behaviour – make it Easy, Attractive, Simple and Timely (EAST). These four simple principles are based on the latest findings on human behaviour and aim to establish a simple framework to provide policymakers with a simple and easy reference to remind them to think about effective behavioural approaches.

The principles that make up EAST are:

- Make it easy

The first principle is to consider how to make it easier for someone to do something, be it live more healthily or pay their taxes on time. Some ways to “make it easy” are:

- Harnessing the power of defaults. We have a strong tendency to stick with the “default” option as it is the simplest and does not require any effort or analysis. Making an option the default makes it more likely to be adopted.
- Reducing the “hassle factor” of making a particular choice. The effort required by accepting the consequences of making a particular decision often discourages people. Therefore, reducing the effort necessary to do something may increase its adoption or the response rate of citizens.
- Simplify messages. Making the message clear often results in a significant increase in response rates to communications.

- Make it attractive

When encouraging a particular behaviour, it needs to be attractive. We are more likely to do something that our attention is drawn towards. The aim is to

take advantage of what behavioural scientists term “salience” to describe the way in which people are more likely to respond to stimuli that are novel, simple and accessible. Ways of doing this include the use of images, colour or personalisation.

- Make it social

Humans are social animals. We are therefore heavily influenced by what those around us do and say. This knock-on effect often goes unnoticed, but it may be used to help policymakers design more effective interventions.

- Make it timely

This last principle establishes that interventions should take into account the time at which people are more receptive to modifying their behaviour. Furthermore, said interventions should take into account that we are disproportionately more motivated by costs and benefits that take effect immediately than those delivered later. This is because the present is perceived as tangible, but the future is abstract and hypothetical.

### **Providing information about the existence of cognitive biases and errors**

Another simple way to harness the knowledge of behavioural economics to promote certain behaviour among individuals is to provide them with information about the biases that affect their decision-making process.

By way of example, this is the procedure adopted by the CNMV to contribute towards improving individuals’ financial capacities and, therefore, their investment process. In particular, the CNMV has published an investor fact sheet on *Psychological mechanisms that influence our investment decisions (2017)*. This is a brief publication that sets out the eight most common biases in this type of decision-making and provides advice on how to reduce their effect. It places great emphasis on the need for adequate information and self-awareness, as well as the need to know that cognitive biases are inherent to human beings.

## **5 Conclusions**

Behavioural economics emerges as a response to the challenges posed by various psychologists and economists to the shortcomings of neoclassical economic theory, in particular, when configuring a model that fits the observed choices made by individuals. *Homo economicus* is not a real agent that faithfully reflects the behaviour of human beings when making economic decisions. Human beings do not have unbounded rationality and they do not always act to maximise their utility. In contrast, other factors such as fear or joy, the context and the behaviour of others have a greater influence on these choices than previously thought. In this regard, behavioural economics focuses on studying a more human *Homo economicus*, irredeemably influenced by his/her circumstances.

However, behavioural economics is not a deterministic or, ultimately, mechanistic discipline that has the right remedy for all the problems and unknowns of decision-making. Behavioural economics is currently operating in the field of hermeneutics and, therefore, in the area of comprehension, of understanding and interpreting the context better in order to correct any shortcomings that may have been detected in individuals' behaviour. Behavioural economics thus has many years of accumulated experience of human behaviour and its consequences.

In this regard, despite still having a diffuse theoretical core and numerous highly diversified empirical works, behavioural economics has clearly shown the cognitive biases that generally affect individuals in decision-making and it has led to the development of strategies or behavioural models to avoid these decisional errors.

Behavioural economics therefore faces two major challenges. Firstly, to continue with its own development, which is still at the initial stages and will depend on the progress made in the sciences that support it, particularly those belonging to the area of neurosciences and psychology. Economics has the opportunity to take advantage of the discoveries being made in these disciplines and the objective methods for studying the functioning of the brain when faced with making decisions in order to increase its knowledge about human behaviour.

Similarly, as the second and perhaps more important challenge, behavioural economics requires an increasingly practical application and its consequent incorporation into regulatory policies. The knowledge gained so far on human behaviour and, in particular, that provided by behavioural economics, may contribute towards developing regulatory policies that are more focused on the individuals at whom they are aimed and, therefore, with the potential to be highly effective.

Finally, the growing importance of disciplines associated with human behaviour and, in particular, behavioural economics is now a clear trend. This knowledge is currently being incorporated into the design of the regulatory policies of numerous countries<sup>7</sup>, particularly in the field of consumer protection. The reason for this is that in order for regulatory policies to be effective and to encourage more appropriate behaviour, they require a thorough understanding of human behaviour. Knowing how individuals actually behave thus becomes a necessity. And this necessity is the ultimate aim of behavioural economics.

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# Analysis of the price behaviour of pre-emptive subscription rights in the latest capital increases in Spain

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# 1 Introduction and basic conclusions

The subscription rights allocated to shareholders in the capital increases of listed companies may be bought and sold on the stock market during the capital increase period, just like the company's shares. Investors interested in becoming shareholders or increasing their holding in a company therefore have two options: to buy outstanding shares at market prices or to buy subscription rights at market prices and later acquire new shares at the issue price previously set by the company.

In an ideal market (efficient and frictionless or, at any event, with equivalent frictions in both scenarios; for example, with equivalent transaction costs), arbitrage opportunities should not be generated as the market price of the pre-emptive subscription rights (PSR) should match the theoretical value of said rights resulting from the market price of the shares. In real markets, however, such opportunities exist to a greater or lesser extent. It may therefore be of interest for the supervisor to analyse whether or not such opportunities are excessive and, in the event that they are, whether they can be corrected because they might be leading to information asymmetry, market abuse conducts or they may be related to the manner in which depositories operate.

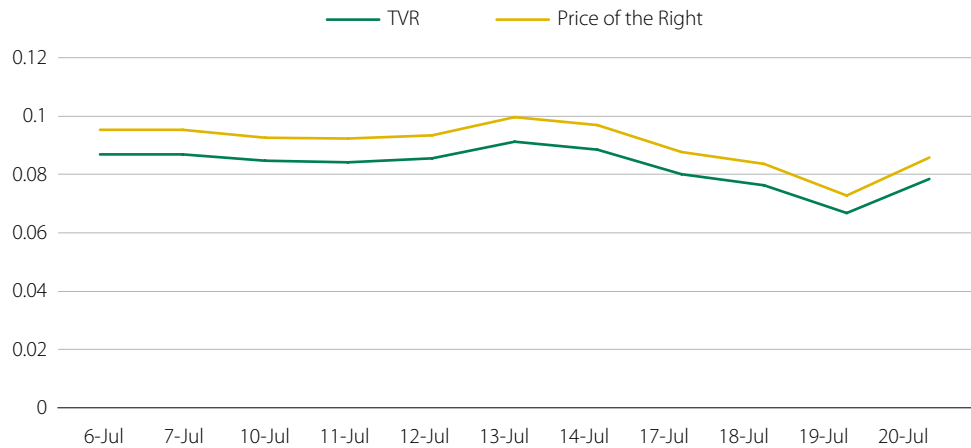
This article evaluates the difference between the price of the subscription rights and their theoretical value in the major capital increases with pre-emptive subscription rights for shareholders that took place in the Spanish market in the period between December 2015 and July 2017. The aim of the study is to discover the effect of a possible mass sale at the final stage of these capital increase processes when the custodians of the rights do not have instructions from their clients in order to determine whether said sale might have resulted in situations that are detrimental to small shareholders.

The study concludes that in no case were there any significant differences between the price of the rights and their theoretical value, although in all of the cases studied (with one single exception), the price of the rights remained slightly above the theoretical value over the capital increase period. This situation may be considered generally beneficial for shareholders intending to sell their rights. The fact that their price is generally quoted above their theoretical value could be explained by interpreting these rights as a call option on the shares and, therefore, the positive difference would be equal to the time value of the option, from which the strike price, which is the issue price of the new shares, is known.

In most of the cases studied (the largest volume capital increases), the analysis has been performed for all the trading carried out over the period and not only for the trading at the close of the session. The sample includes the following companies: Banco Santander (July 2017; with the largest increase in volume and number of

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### Theoretical value of the right (TVR) and price of the right. Banco Santander



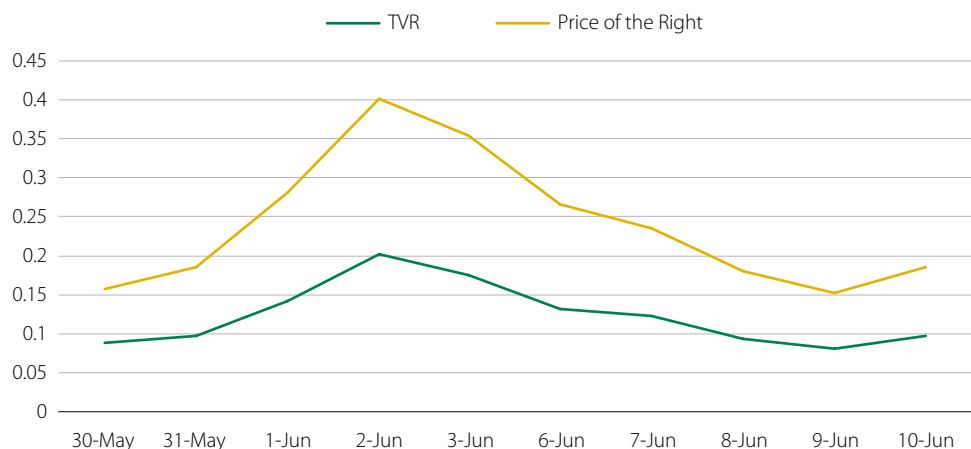
small shareholders), Banco Popular (May 2016), FCC (February 2016), Hispania (May 2016), Sniace (May 2016), Lar España (July 2016) and Realia (December 2016 and 2017).

By way of example, together with an analysis based on all the transactions performed for the security in the case of the largest volume increases and on the closing prices for the others, a graphic illustration is provided of the intraday behaviour in the trading sessions during the period for exercising the rights for a sample of four companies: Banco Santander, Banco Popular, Hispania and Sniace.

As already noted, the analysis of market trading (and its graphical representation) does not reveal any significant differences between the market price of the right and its theoretical value. It can therefore be concluded that in the latest increases there have been no situations relating to the aforementioned actions that might have significantly harmed small shareholders.

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### Theoretical value of the right (TVR) and price of the right. Banco Popular



## 2 Capital increases in Spanish stock markets

Based on the information available at the CNMV, a sample has been taken of the main capital increases<sup>1</sup> with trading of pre-emptive subscription rights that took place in Spanish market between December 2015 and July 2017. Below is a list of these increases and their amounts:

Company	Increase date	Effective amount (€m)
Realia Business, S. A.	December 2015	88.96
FCC, S. A. (Fomento)	February 2016	709.52
Sniace, S. A.	May 2016	15.6
Hispania Activos Inmob. (SOCIMI)	May 2016	230.7
Banco Popular Español	June 2016	2,505.5
Lar España Real Estate S. A. (SOCIMI)	July 2016	147.2
Realia Business, S. A.	December 2016	147.2
Banco Santander	July 2017	7,072.4

When a capital increase takes place, the holder of pre-emptive subscription rights has three options:

- i) Participate in the increase by subscribing shares in proportion to the rights held. It is also possible to participate partially by selling surplus rights on the market or by subscribing shares in a greater proportion than the available rights, for which purpose it will be necessary to acquire additional rights in the market.
- ii) Sell the rights in the market during the increase period.
- iii) Do nothing, in which case the entity in which the rights are deposited will sell them in the market. This sale usually takes place in the last days of the increase period.

Shareholders usually have their securities deposited with a financial institution, which is responsible for informing its customers about the transactions relating to the securities deposited with it (capital increases, takeover bids, receipt of dividends, etc.). Standard securities custody and administration contracts therefore establish clauses that empower the entity to perform all actions and transactions inherent to the administration of securities or other financial instruments so that they keep the rights corresponding to them in accordance with legal provisions. This will include the entity informing its customers about all the voluntary or optional actions relating to the deposited securities, as well as requesting the appropriate instructions,

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<sup>1</sup> All increases with an effective amount of less than 10 million euros have been excluded. Similarly, some increases were excluded for being unrepresentative given that, despite being performed with pre-emptive subscription rights for the shareholder, they were subscribed by one single investor or a low number of investors.

which the entity must receive by the deadline that it indicates in each case so that the transactions may be completed in due time and form<sup>2</sup>.

In the case of pre-emptive subscription rights, if the entity does not receive express instructions from the customer, it is expressly and irrevocably empowered to sell the non-exercised subscription rights prior to their expiry if they are negotiable and there is a market, as well as the surplus subscription rights.

### 3 Methodology

Since both the subscription rights and the shares themselves are quoted throughout the trading session, price data are available for all trading sessions. Thus, despite the large amount of data and the complexity involved in processing said data, a detailed analysis has been conducted in all the larger-volume increases (which include all the transactions on these securities) of all the trading performed in the period and not only the trading at the close of the session. These are the increases carried out by the following companies: Banco Santander (July 2017), with the largest increase in volume and number of non-controlling shareholders; Banco Popular (May 2016); FCC (February 2016); Hispania (May 2016); and SNIACE (May 2016). For the others - Lar España (July 2016) and Realia (December 2016 and 2017) -, for the sake of simplicity in the calculation, data of the closing price of the rights and of the share itself over those days in which the rights have been traded were taken for each one of the capital increases.

Based on the information on the conditions established in these eight increases, the theoretical value of the subscription rights at every moment at which trading took place has been calculated for the first group and the theoretical value at the close of each one of the sessions has been calculated for the second group.

In an efficient market, the market price of the right should match its theoretical value. Consequently, the cost for the investor of buying shares in the company should be the same or similar irrespective of whether the investor does so by buying outstanding shares in the market or by participating in the capital increase to acquire the necessary rights. Otherwise, this would lead to potential arbitrage in the market which better informed investors might benefit from.

However, it is important to bear in mind that there may be factors, such as the transaction costs (fees) or the tax treatment, which discourage arbitrage if the benefits are very small. This situation might lead to a certain difference between the theoretical value of the subscription right and its market price.

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2 Entities typically request that the appropriate instructions are transmitted to them with a margin of at least two trading days on the market in which the rights are listed prior to the end of the operation in question so that this may be completed within the specified time limits.

## 4 Results

The results of the analysis (see Annex) show that in most cases (with one exception) the difference between the market price of the subscription right and its theoretical value is positive, which benefits shareholders of the companies themselves as they can sell their rights for more than the theoretical amount. In quantitative terms, however, this difference is small, and hence execution costs (fees) would reduce the potential benefits of arbitrage to very low amounts. In statistical terms, the difference is not significant.

The amount of the difference between the two prices does not remain stable over time and does not follow a time pattern. It cannot therefore be concluded that the benefit of any arbitrage will disappear or increase over time.

## 5 Capital increase of Banco Santander

Because of its features, the recent capital increase of Banco Santander in July 2017 was unique as the value of the operation exceeded 7 billion euros in a bank that had over 4 million shareholders<sup>3</sup>, of which over 3.5 million were minority shareholders with an aggregate holding in the share capital of 38.66%. This is therefore a particularly interesting case not only because of its volume, but also because of the involvement of a large number of retail investors.

The following table shows the individual results of the analysis for Banco Santander<sup>4</sup>:

Date	PSR market price	PSR theoretical value	Difference: PSR market - theoretical
06/07/2017	0.0954	0.0869	0.00840
07/07/2017	0.0952	0.0869	0.00830
10/07/2017	0.0927	0.0846	0.00811
11/07/2017	0.0922	0.0843	0.00792
12/07/2017	0.0935	0.0854	0.00802
13/07/2017	0.0997	0.0912	0.00851
14/07/2017	0.0969	0.0885	0.00833
17/07/2017	0.0876	0.0801	0.00745
18/07/2017	0.0836	0.0764	0.00727
19/07/2017	0.0728	0.0667	0.00605
20/07/2017	0.0857	0.0784	0.00735

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3 According to Banco Santander data as of July 2017, the number of shareholders was weighted towards the tranches with the lowest number of shares as follows: between 1 and 200, 2,537,042 shareholders; between 201 and 1,000, 719,593 shareholders, and between 1,001 and 3,000, 414,535 shareholders.

4 Closing price data are considered for each of the sessions.

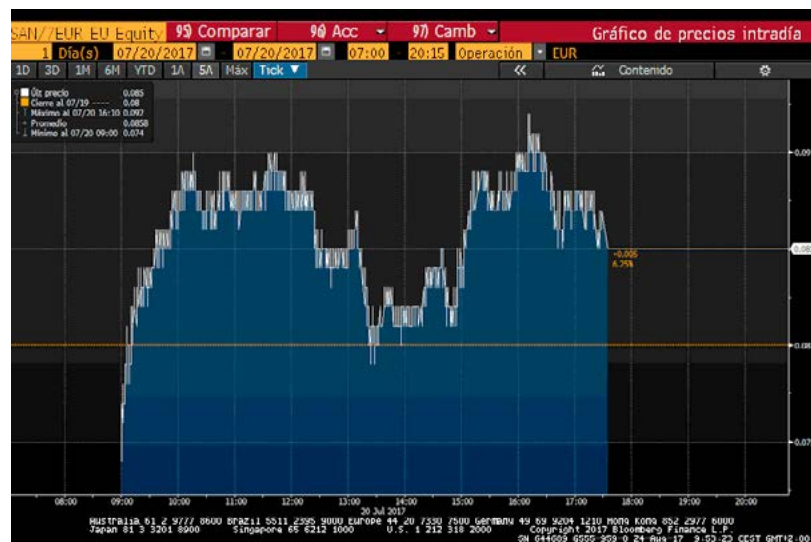
The data show that throughout every session, the price of Banco Santander rights was very close to its theoretical value, making any type of arbitrage difficult, with a positive difference.

This small difference remains relatively stable throughout the period of the capital increase, which, once again, would have discouraged any potential arbitrage. Even so, an informed investor could have made use of any opportunity for arbitrage, however small.

Opportunities for arbitrage might have increased in the last day of trading of the rights as the entities responsible for custody of the securities placed all the rights for which they did not have any instructions from their (mainly retail) customers for sale on the market. This mass sale of rights in a very short period of time might have generated a significant fall in prices and led to significant temporary differences with regard to the theoretical value. However, the graphic analysis of the movements in the prices of the rights on the last day of trading (20 July 2017) does not show that said differences arose.

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### Intraday price of Banco Santander subscription rights



Source: Bloomberg.



## Intraday price of Banco Santander shares



Source: Bloomberg.

As can be seen in both graphs, the prices moved in parallel throughout the day. The price of the subscription rights over time includes the adjustments resulting from the change in its value as a consequence of movements in the share price. Thus, not even in the first few hours of the session (which is when entities put on sale a significant number of rights from customers from whom they have not received any instructions) can we notice a significant difference, and the lower prices correspond to the fall in market prices.

In addition, as shown in the aforementioned graph, the pre-emptive subscription rights of Banco Santander were systematically priced in the market at above their theoretical value.

An explanation of this situation is that pre-emptive subscription rights may be considered call options on the share, from which the strike price, which is the issue price of the new shares, is known.

Investors therefore have two options:

- a) To buy the share directly on the market at its quoted price. This is the cheaper option, but it involves paying out the full cost of the share and it is subject to market risk throughout the period of the capital increase.
- b) To buy the pre-emptive subscription right on the market during the period of the capital increase. This is the more expensive option, but it allows buyers to know what price they will eventually pay for the share when the increase ends (they will pay the issue price plus the cost of the subscription rights), and to withdraw from the transaction if the sale price falls. In addition, they may sell the right again in the market before the increase ends if the underlying trend is not as expected, which would limit their potential loss.

Therefore, given that during the capital increase period, the pre-emptive subscription right functions as a call option, there are two components in this price: the theoretical value and the time value (not included in the above option).

## 6 Conclusions

There are no significant differences between the market price for rights and their theoretical value in any of the cases. In fact, in practically every case (with one single exception), the difference is systematically positive in favour of the company's shareholders, who may have sold their rights on the market at above the theoretical value. This positive difference may be interpreted as the time value of the call option implicitly incorporated into the pre-emptive subscription rights.

Despite the above, the amount of the difference and the potential benefit would only be significant in aggregate terms if a high number of rights were held therefore an informed retail investor might not do anything throughout the capital increase period. In such a case, the investor would prefer to wait until the entity itself sold the rights in the last sessions as the costs associated with the sale and the opportunity cost of the transaction do not exceed the potential benefit obtained from the sale of the rights in the market.

Similarly, the amount of any temporary differences is so small that the transaction costs would reduce any possible benefit to a minimum.

Finally, it has been observed that the aforementioned pattern also remains over the last sessions of the subscription period despite the greater sale activity of subscription rights which usually takes place in those sessions as a consequence of the lack of express instructions from shareholders.

## 7 Annex

Share / Increase date	PSR Market Price session average	PSR Theoretical Value session average	Difference: PSR market – theoretical value
<b>BANCO SANTANDER</b>			
06/07/2017	0.0954	0.0869	0.00840
07/07/2017	0.0952	0.0869	0.00830
10/07/2017	0.0927	0.0846	0.00811
11/07/2017	0.0922	0.0843	0.00792
12/07/2017	0.0935	0.0854	0.00802
13/07/2017	0.0997	0.0912	0.00851
14/07/2017	0.0969	0.0885	0.00833
17/07/2017	0.0876	0.0801	0.00745
18/07/2017	0.0836	0.0764	0.00727
19/07/2017	0.0728	0.0667	0.00605
20/07/2017	0.0857	0.0784	0.00735
<b>BANCO POPULAR</b>			
30/05/2016	0.1575	0.0878	0.06974
31/05/2016	0.1859	0.0979	0.08802
01/06/2016	0.2811	0.1418	0.13931
02/06/2016	0.4012	0.2014	0.19988
03/06/2016	0.3542	0.1751	0.17914
06/06/2016	0.2664	0.1315	0.13490
07/06/2016	0.2354	0.1233	0.11212
08/06/2016	0.1797	0.0938	0.08596
09/06/2016	0.1521	0.0808	0.07134
10/06/2016	0.1853	0.0970	0.08825
<b>HISPANIA ACTIVOS SOCIMI</b>			
16/05/2016	1.3305	0.6793	0.65118
17/05/2016	0.9086	0.6835	0.22514
18/05/2016	0.8612	0.6619	0.19928
19/05/2016	0.7318	0.5602	0.17152
20/05/2016	0.7387	0.5703	0.16839
23/05/2016	0.8344	0.6362	0.19815
24/05/2016	0.7991	0.6142	0.18492
25/05/2016	0.7321	0.5632	0.16889
26/05/2016	0.7410	0.5693	0.17179
27/05/2016	0.7471	0.5739	0.17320
<b>SNIACE</b>			
05/05/2016	0.1403	0.0942	0.04616
06/05/2016	0.1097	0.0833	0.02647
09/05/2016	0.0823	0.0620	0.02028
10/05/2016	0.1001	0.0758	0.02427
11/05/2016	0.1123	0.0877	0.02456
12/05/2016	0.1065	0.1509	-0.04440
13/05/2016	0.0971	0.0786	0.01847
16/05/2016	0.0800	0.0722	0.00775
17/05/2016	0.0389	0.0638	-0.02489
18/05/2016	0.0379	0.0798	-0.04185
19/05/2016	0.0503	0.1447	-0.09437

NB: Estimate made using average prices over session.

Share / Increase date	PSR Market Price close	PSR Theoretical Value close	Difference: PSR market – theoretical value
<b>REALIA BUSINESS</b>			
16/12/2015	0.0520	0.0278	0.02415
17/12/2015	0.0360	0.0262	0.00979
18/12/2015	0.0690	0.0409	0.02806
21/12/2015	0.0700	0.0426	0.02742
22/12/2015	0.0710	0.0458	0.02515
23/12/2015	0.0720	0.0458	0.02615
24/12/2015	0.0720	0.0458	0.02615
28/12/2015	0.0720	0.0458	0.02615
29/12/2015	0.0740	0.0491	0.02488
30/12/2015	0.0900	0.0557	0.03433
<b>FOMENTO (FCC)</b>			
12/02/2016	0.1750	0.1373	0.03765
15/02/2016	0.1880	0.1536	0.03442
16/02/2016	0.1800	0.1249	0.05514
17/02/2016	0.1720	0.1308	0.04121
18/02/2016	0.1800	0.1286	0.05139
19/02/2016	0.1800	0.1317	0.04827
22/02/2016	0.1980	0.1405	0.05753
23/02/2016	0.1980	0.1389	0.05909
24/02/2016	0.1860	0.1327	0.05333
25/02/2016	0.1880	0.1317	0.05627
26/02/2016	0.1350	0.0961	0.03886
<b>LAR ESPAÑA SOCIMI</b>			
11/07/2016	0.7040	0.4791	0.22494
12/07/2016	0.7100	0.4923	0.21772
13/07/2016	0.6770	0.4758	0.20124
14/07/2016	0.6830	0.4692	0.21385
15/07/2016	0.5900	0.4097	0.18032
18/07/2016	0.5880	0.4064	0.18162
19/07/2016	0.6750	0.4658	0.20915
20/07/2016	0.6800	0.4642	0.21581
21/07/2016	0.7610	0.5121	0.24890
22/07/2016	0.8300	0.5418	0.28816
<b>REALIA BUSINESS II</b>			
06/12/2016	0.0140	0.0114	0.00258
07/12/2016	0.0130	0.0114	0.00158
08/12/2016	0.0140	0.0100	0.00401
09/12/2016	0.0160	0.0114	0.00458
12/12/2016	0.0160	0.0114	0.00458
13/12/2016	0.0170	0.0086	0.00844
14/12/2016	0.0170	0.0086	0.00844
15/12/2016	0.0150	0.0071	0.00786
16/12/2016	0.0150	0.0128	0.00216
19/12/2016	0.0130	0.0100	0.00301
20/12/2016	0.0130	0.0114	0.00158

NB: Estimate made using average closing price.

## Example: Capital increase of Banco Santander

Below is an analysis of whether the difference between the market price of the pre-emptive subscription rights and their theoretical value in the case of the recent capital increase undertaken by Banco Santander is other than zero. For this purpose, a test is performed for each one of the days of the capital increase, where

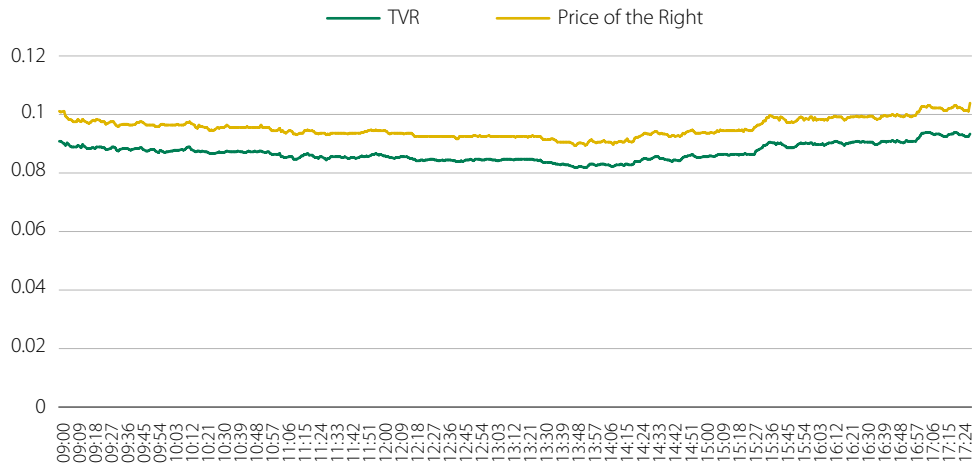
$H_0$ : the difference between both values,  $d$ , is equal to zero.

$H_1$ : the difference between both values,  $d$ , is other than zero.

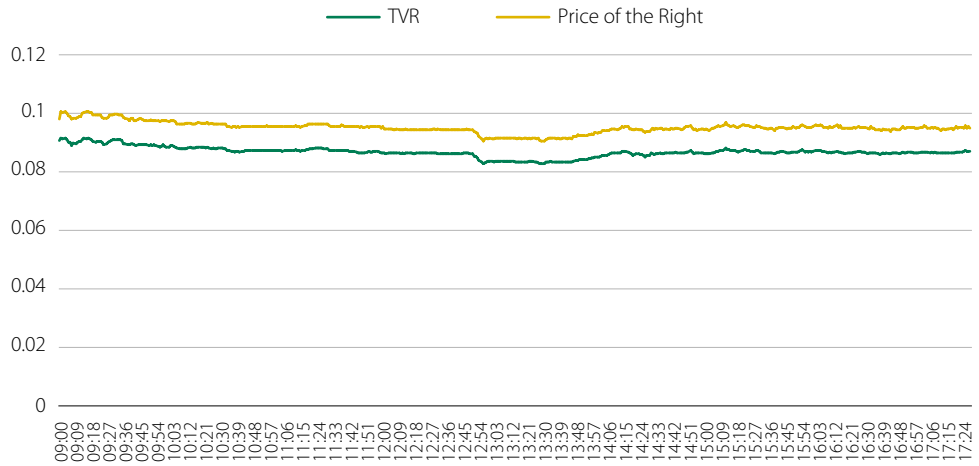
Date	$\bar{d}$ (Right-TVR)	t	t* (95 %)	Significance
06/07/2017	0.00840	426.000992	1.96	Yes
07/07/2017	0.00830	637.528966	1.96	Yes
10/07/2017	0.00811	629.324321	1.96	Yes
11/07/2017	0.00792	667.276323	1.96	Yes
12/07/2017	0.00802	809.11607	1.96	Yes
13/07/2017	0.00851	816.988925	1.96	Yes
14/07/2017	0.00833	636.49543	1.96	Yes
17/07/2017	0.00745	624.242457	1.96	Yes
18/07/2017	0.00727	506.424636	1.96	Yes
19/07/2017	0.00605	248.86055	1.96	Yes
20/07/2017	0.00735	349.388922	1.96	Yes

Technical note: A test is conducted to verify whether the difference between the value of rights on the market and the theoretical value is significantly other than zero. For this purpose, two samples are taken, the first with the prices of the rights in the market and the second with their theoretical value at the same time. A null hypothesis is established, according to which there are no differences between the two samples ( $H_0: d = 0$ ) and the observed differences are only due to chance. The alternative hypothesis ( $H_1: d \neq 0$ ) implies that the difference is statistically significant or that both samples are really different. The truthfulness of this hypothesis can be verified by means of the Student's t test, which is based on the statistic  $t = \frac{\bar{d}}{\hat{S}_d} \sqrt{n}$  where  $\bar{d}$  denotes the mean of the differences between the two values for the sample and  $\hat{S}_d$  the sampling quasi-variance of the differences. The result of the t statistic is contrasted against that of its distribution with a 95% confidence level, which corresponds to a value of  $t^* = 1.96$ . If  $t < 1.96$ , we accept that there are no significant differences between both values. Otherwise, the difference is significant at that level of confidence.

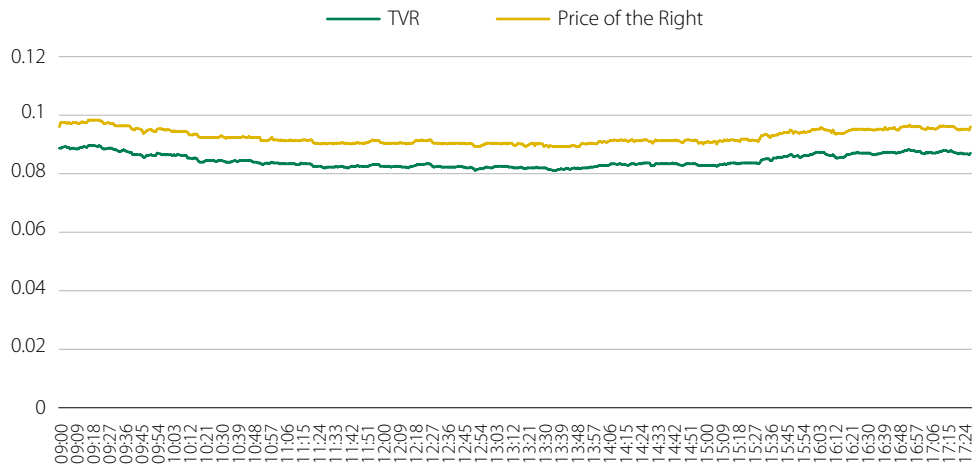
**Banco Santander: Difference between market value and theoretical value of subscription rights per day**



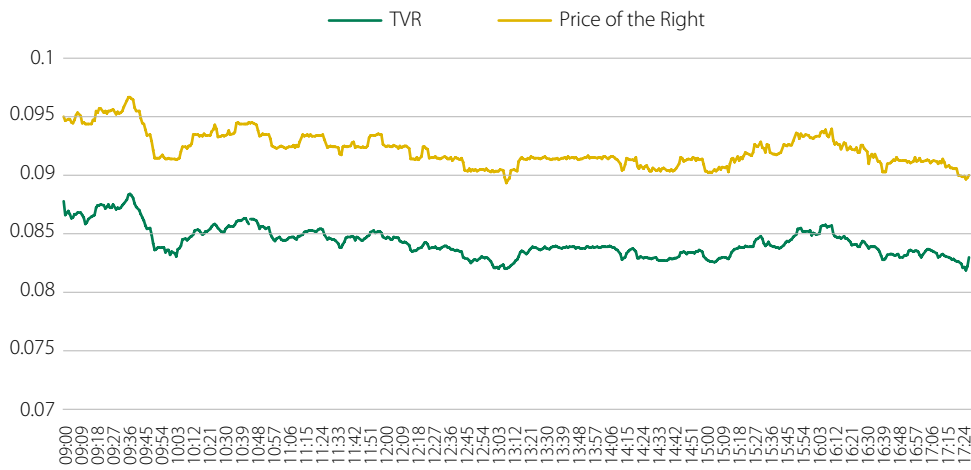
Banco Santander, 6/July.



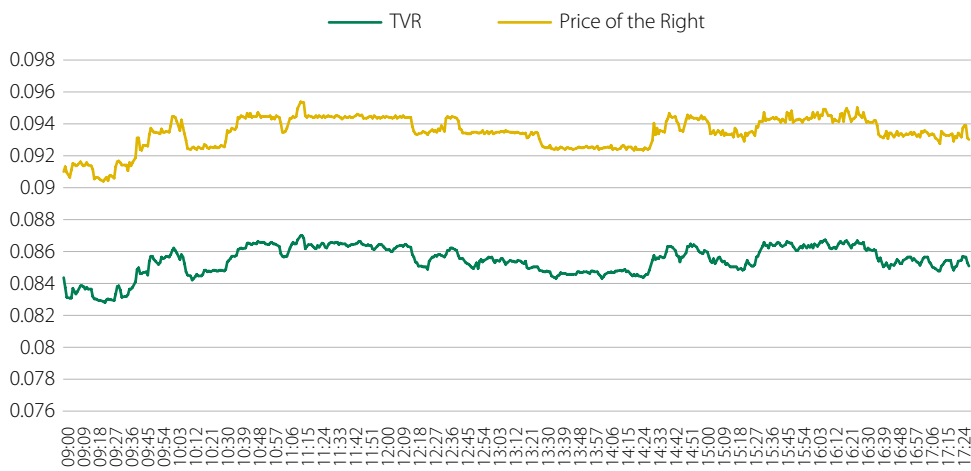
Banco Santander, 7/July.



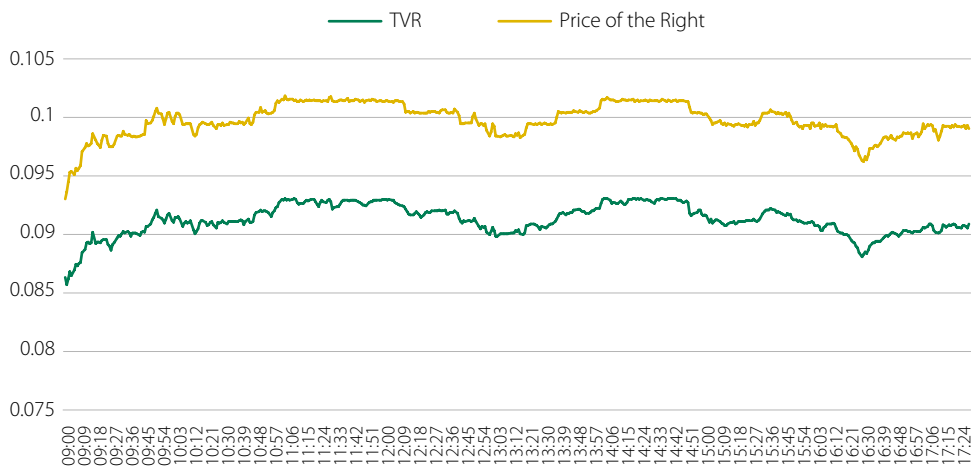
Banco Santander, 10/July.



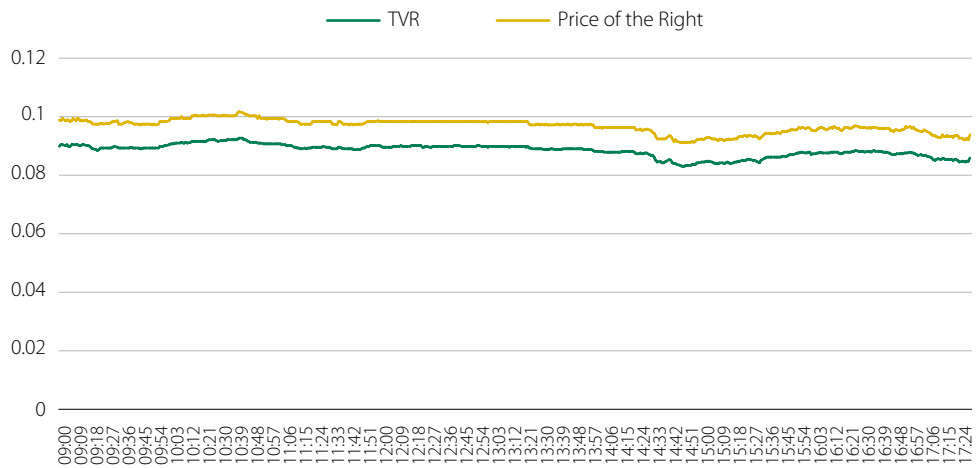
Banco Santander, 11/July.



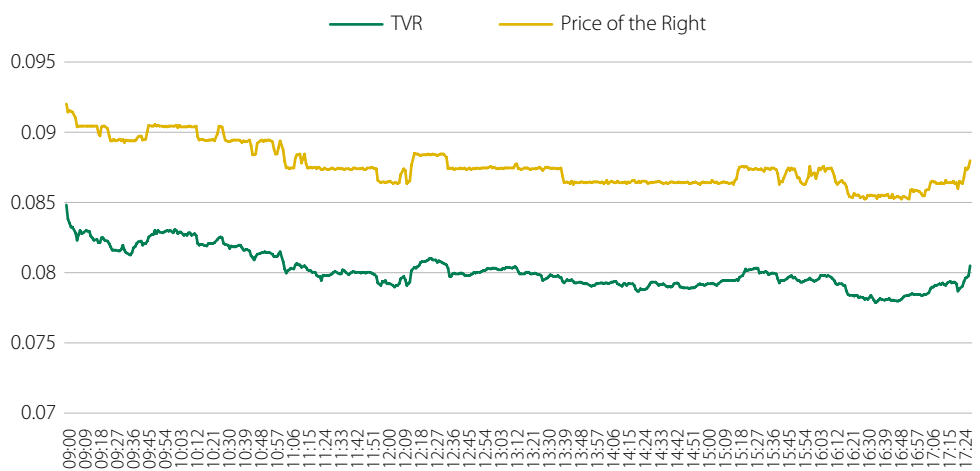
Banco Santander, 12/July.



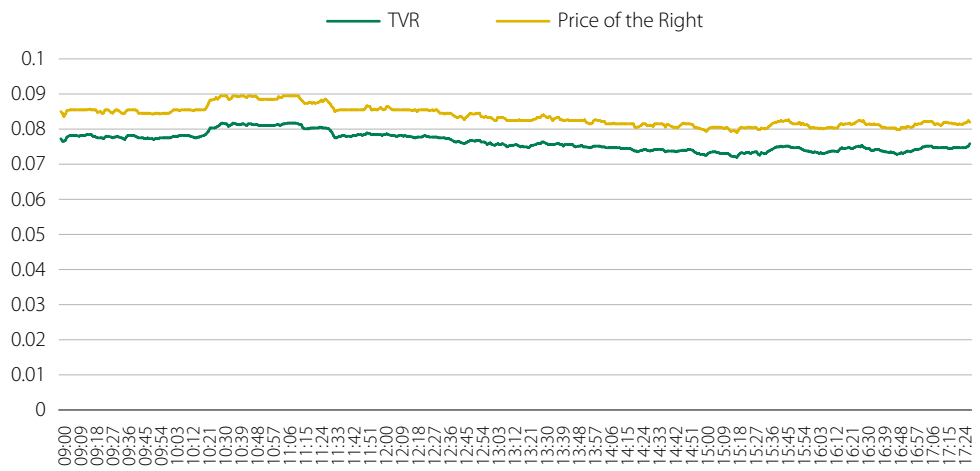
Banco Santander, 13/July.



Banco Santander, 14/July.

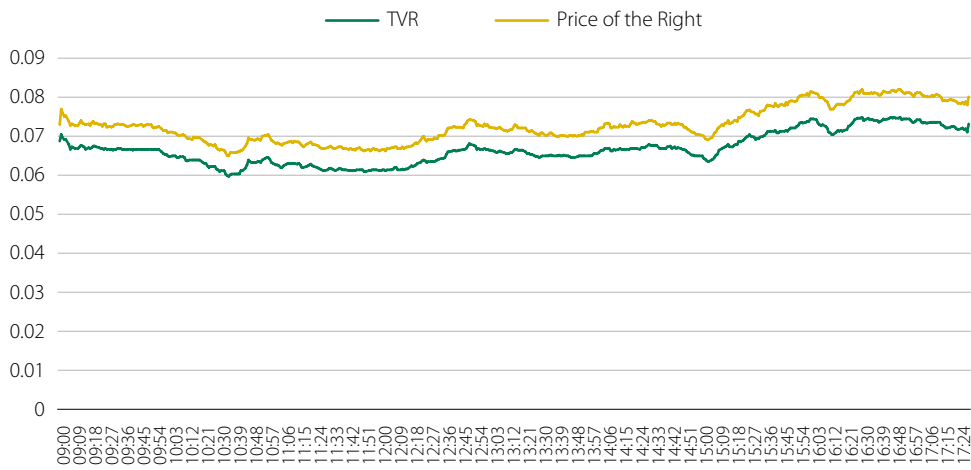


Banco Santander, 17/July.

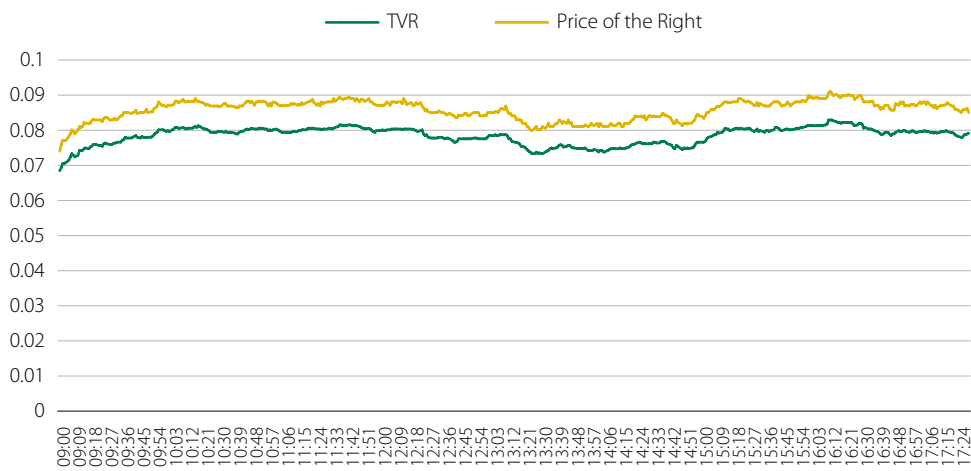


Banco Santander, 18/July.





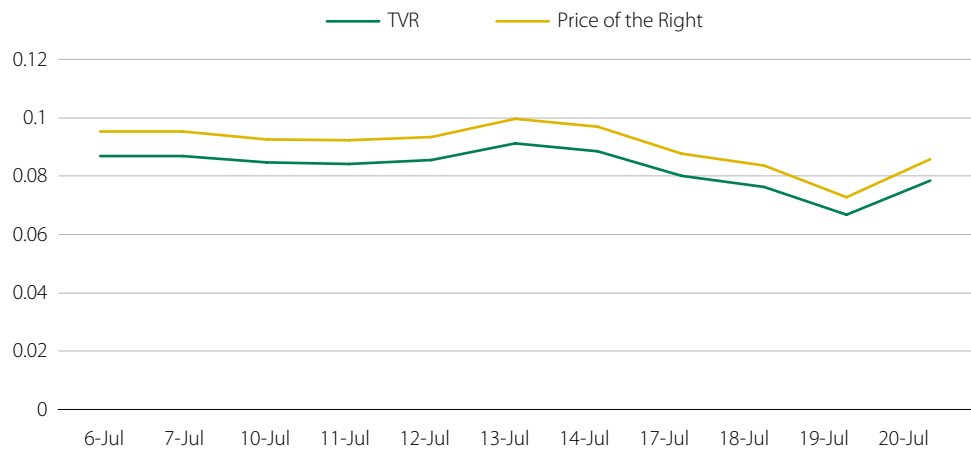
Banco Santander, 19/July.



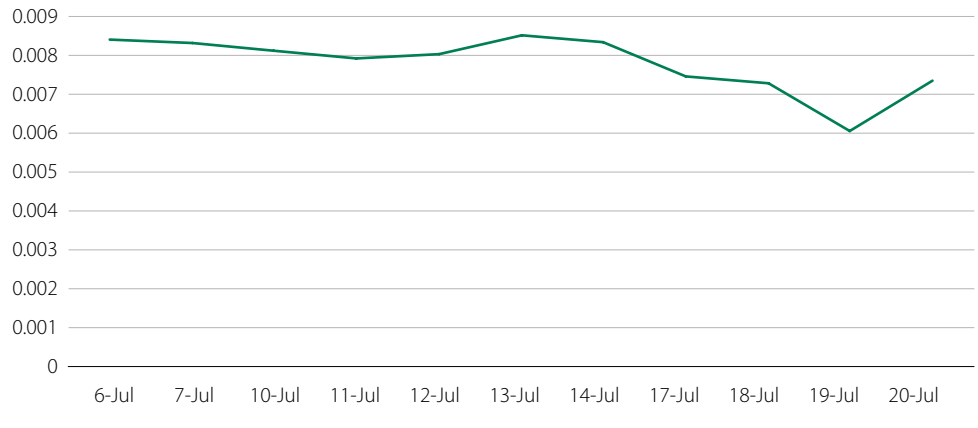
Banco Santander, 20/July.

### Theoretical value and price of the subscription rights of Banco Santander

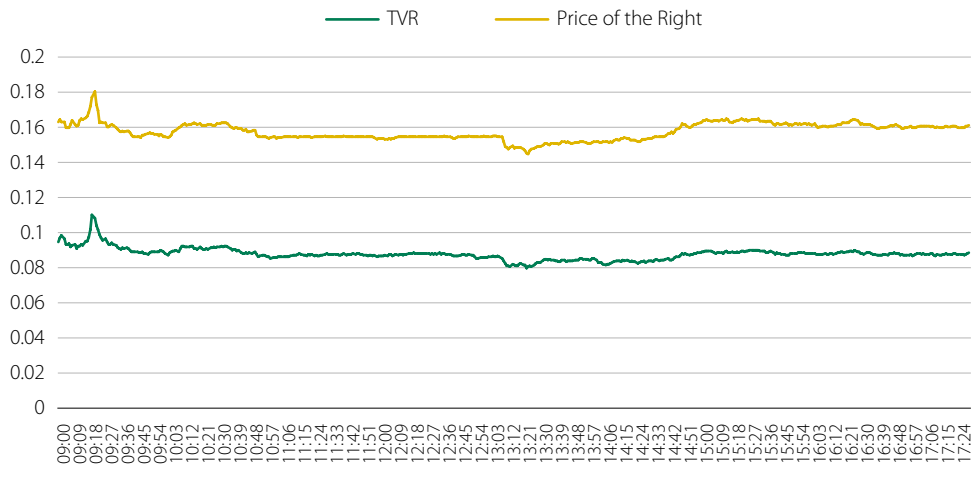
#### Theoretical value of the right (TVR) and price of the right Banco Santander



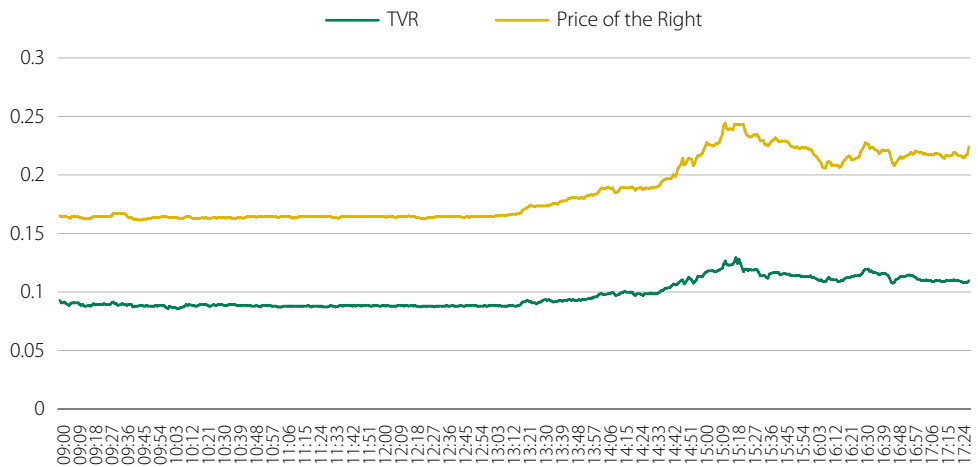
### Right-TVRR



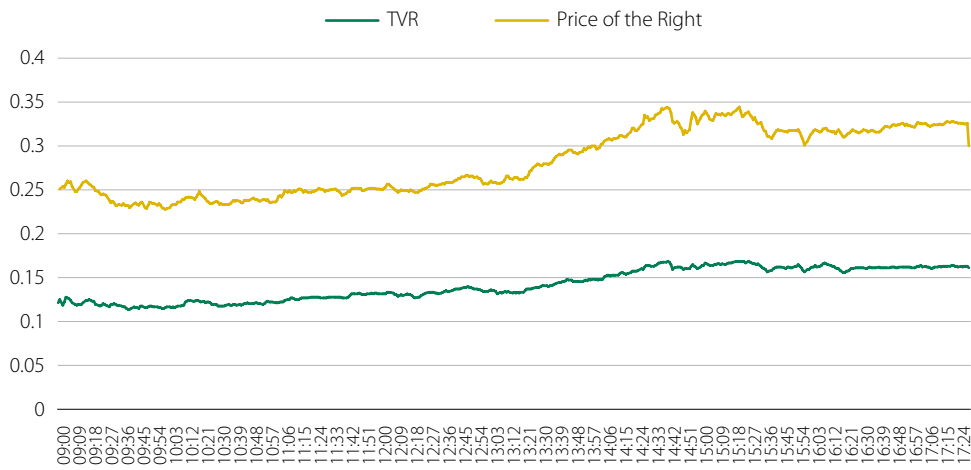
### Banco Popular: Difference between market value and theoretical value of subscription rights per day



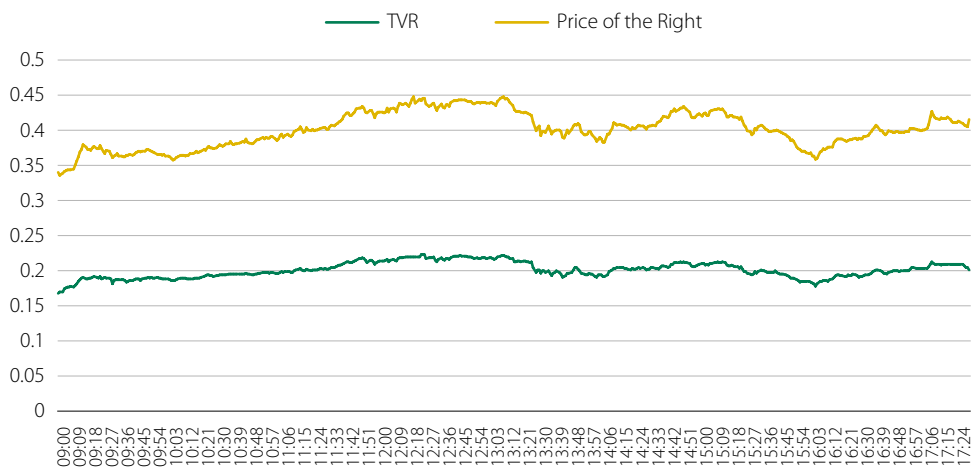
### Banco Popular, 30/May.



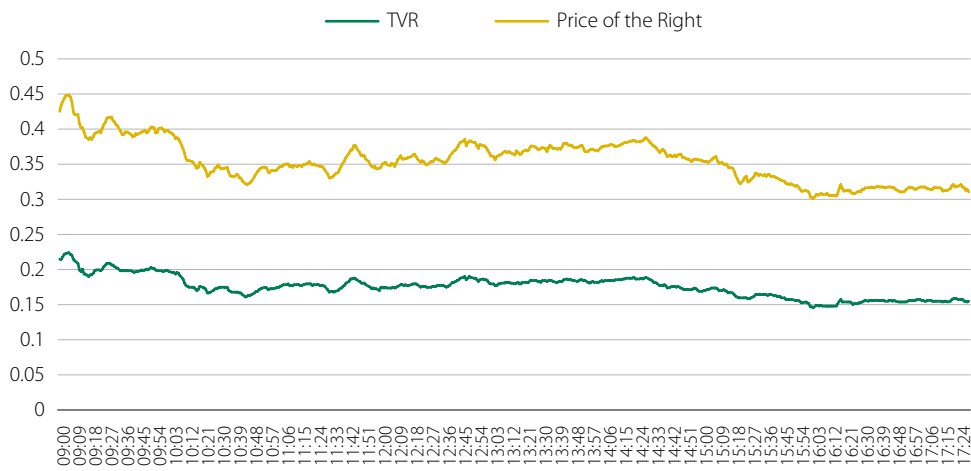
### Banco Popular, 31/May.



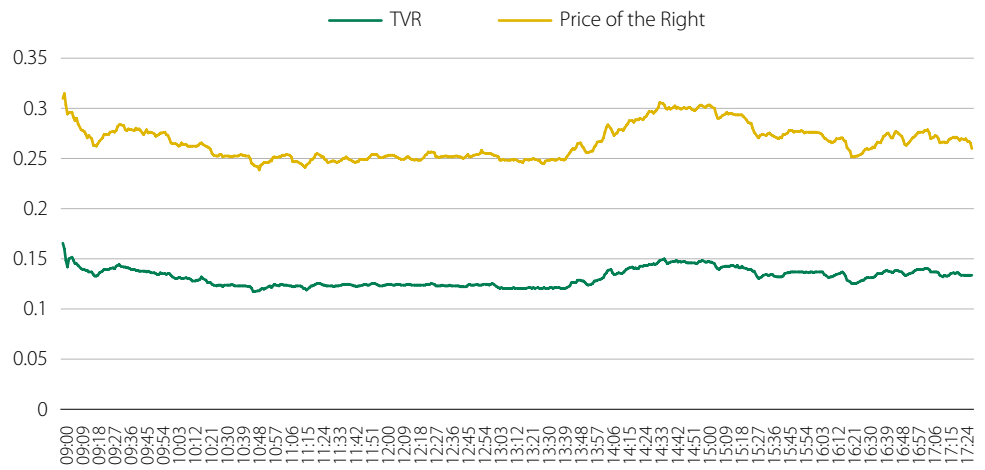
Banco Popular, 1/June.



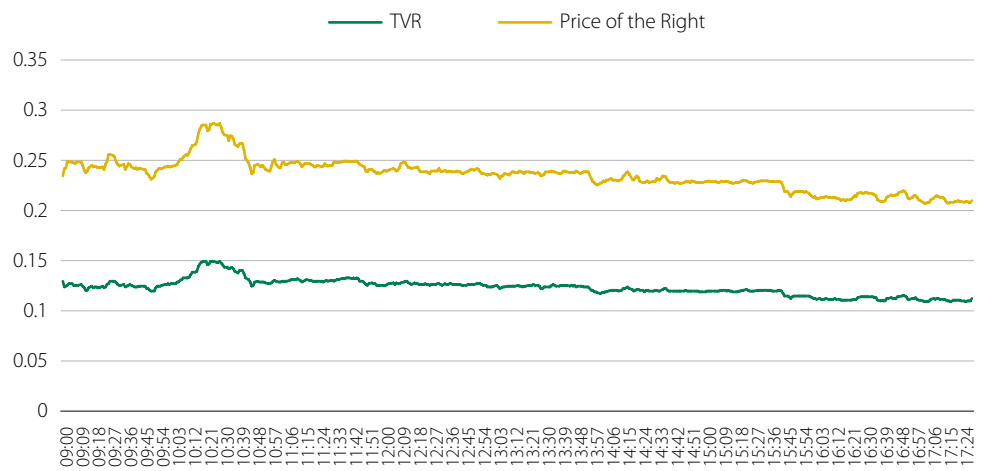
Banco Popular, 2/June.



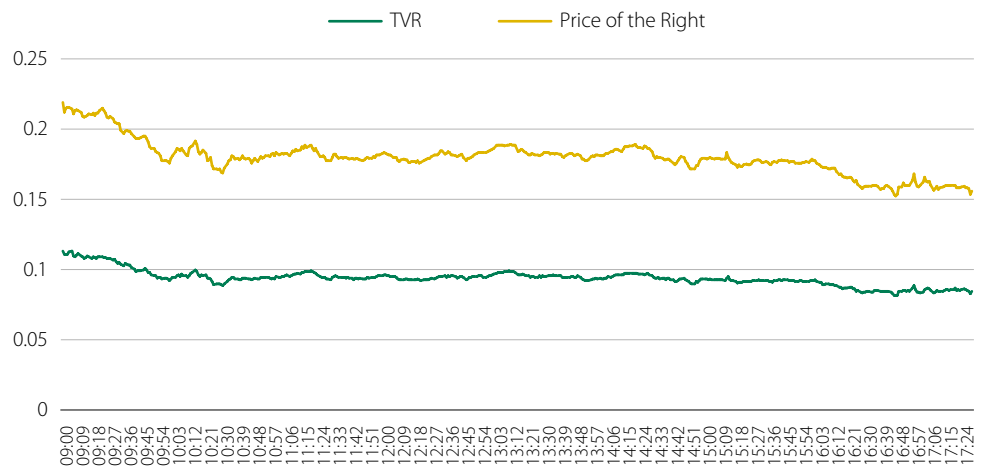
Banco Popular, 3/June.



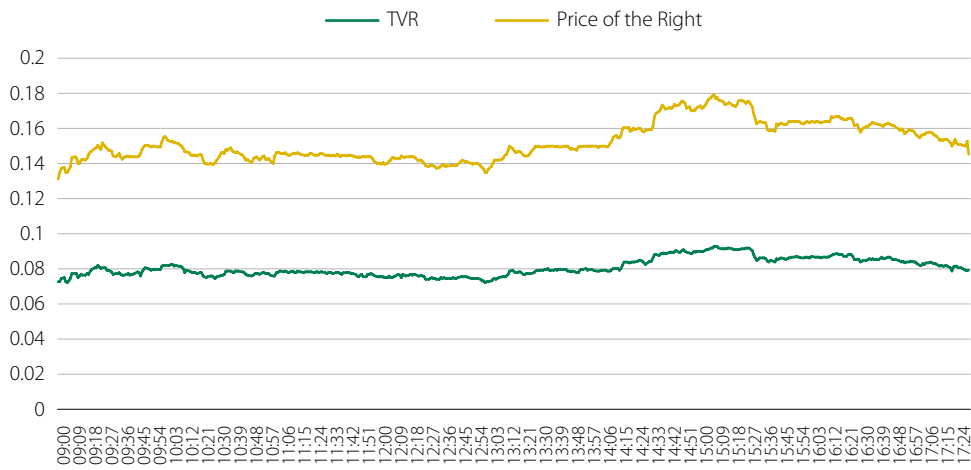
Banco Popular, 6/June.



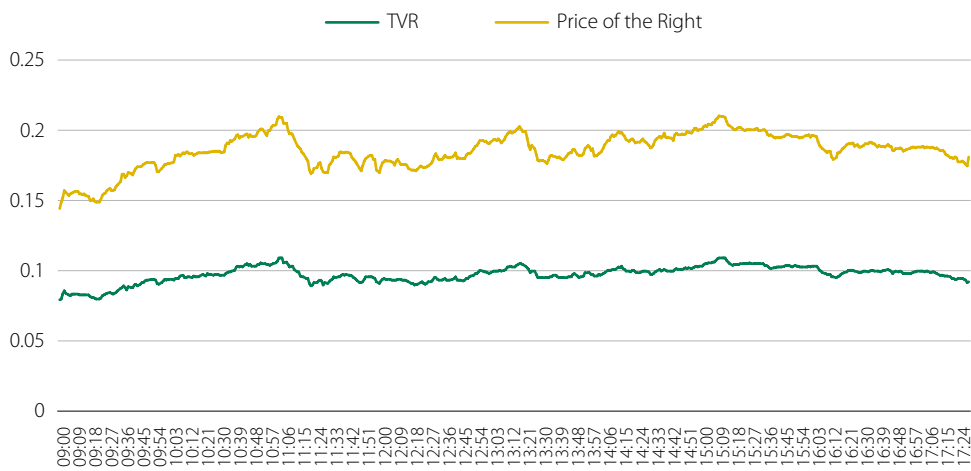
Banco Popular, 7/June.



Banco Popular, 8/June.



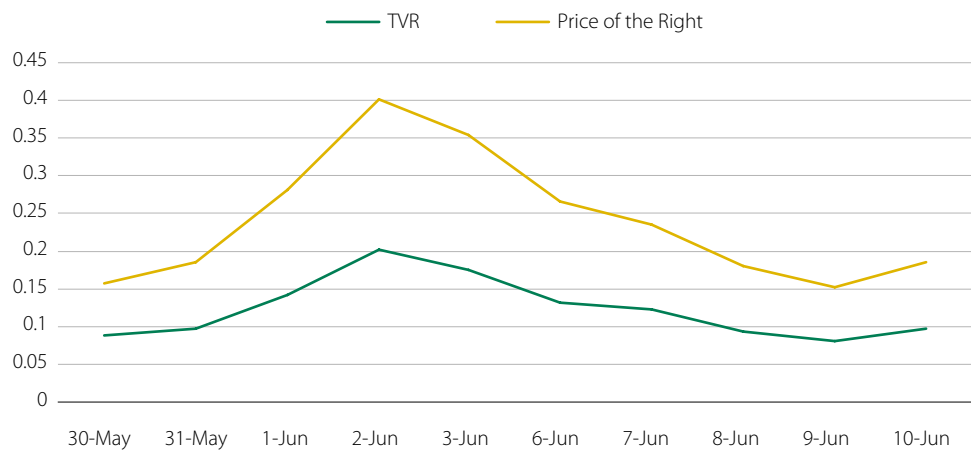
Banco Popular, 9/June.



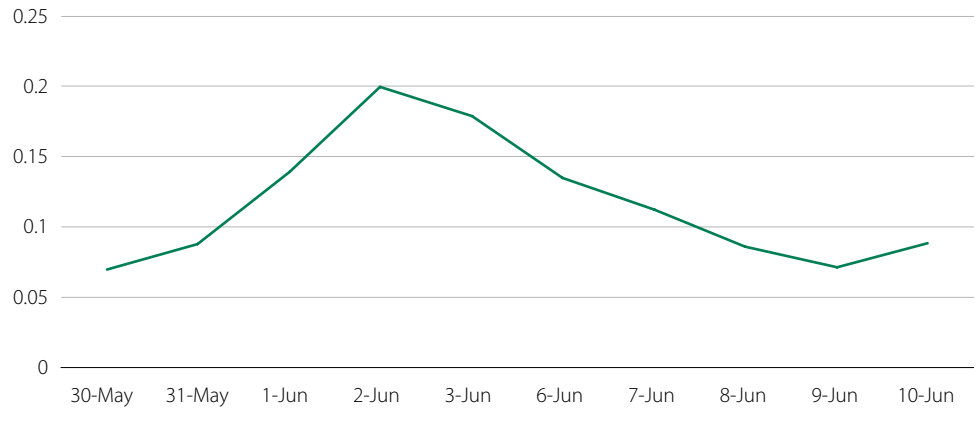
Banco Popular, 10/June.

### Theoretical value and price of the subscription rights of Banco Popular

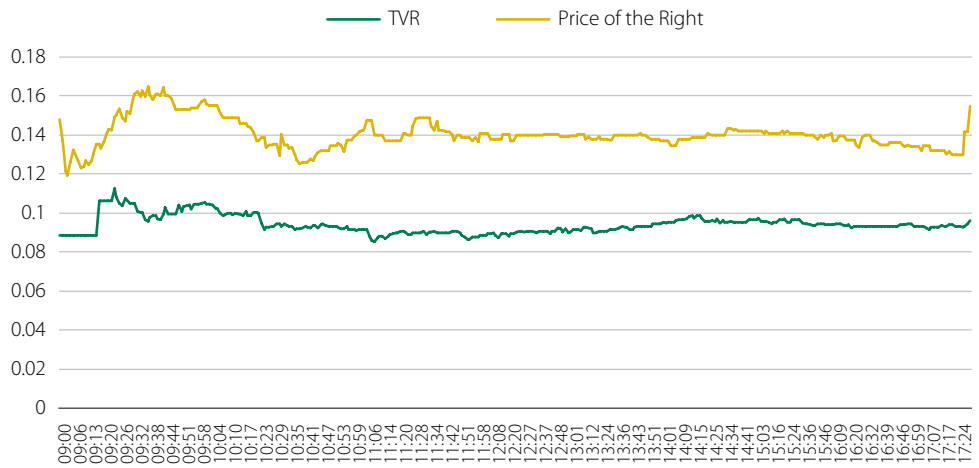
#### Theoretical value of the right (TVR) and price of the right Banco Popular



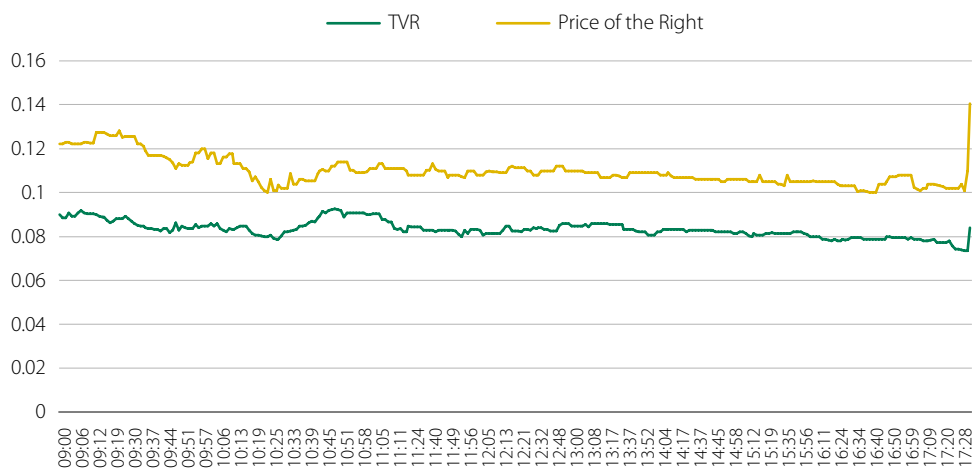
### Right-TVR



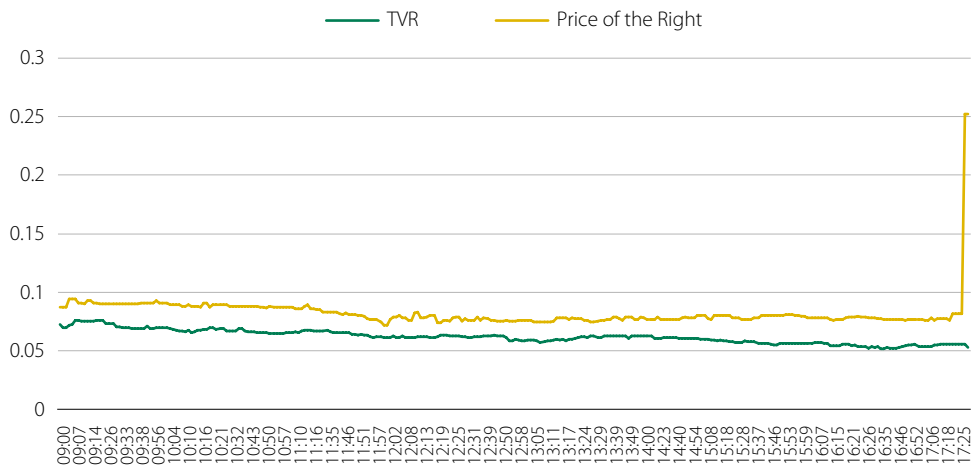
### SNIACE: Difference between market value and theoretical value of subscription rights per day



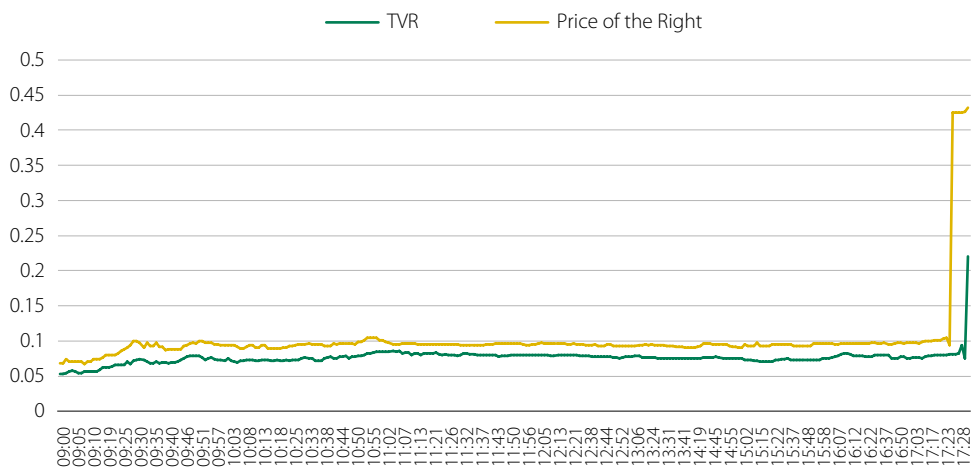
### SNIACE, 5/May.



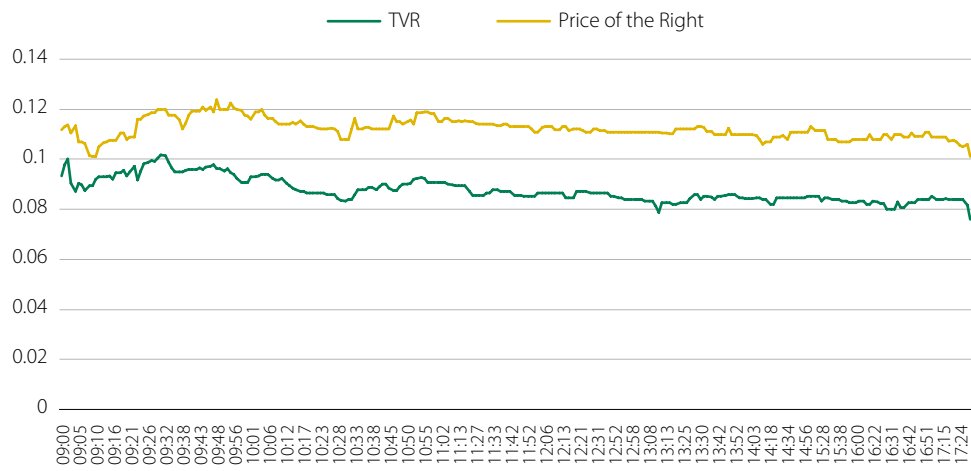
### SNIACE, 6/May.



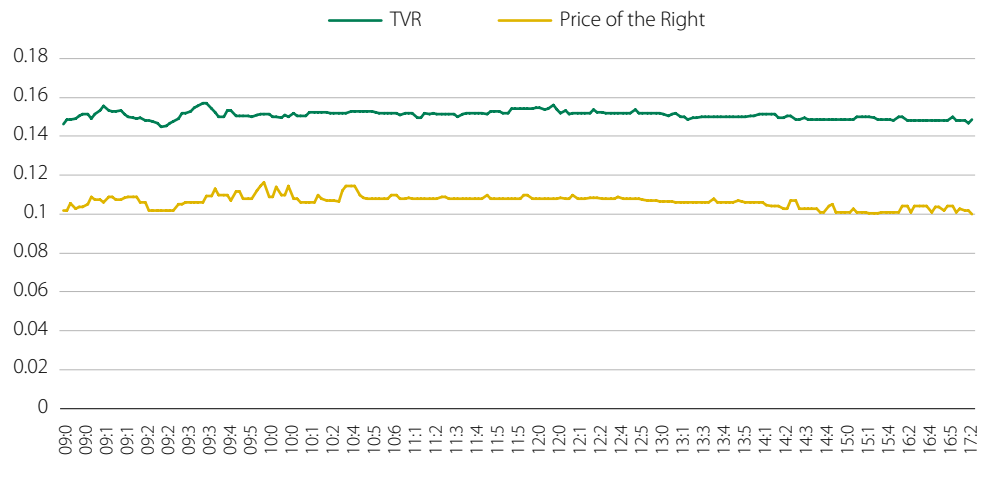
SNIACE, 9/May.



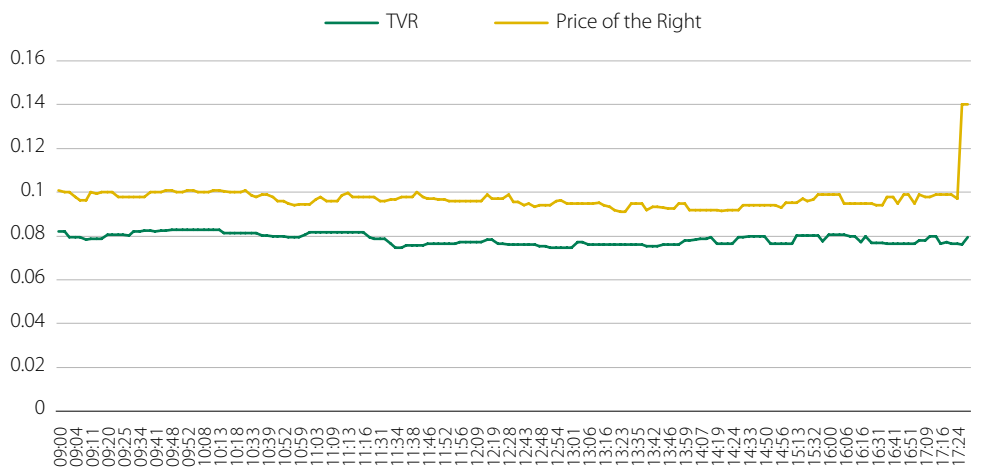
SNIACE, 10/May.



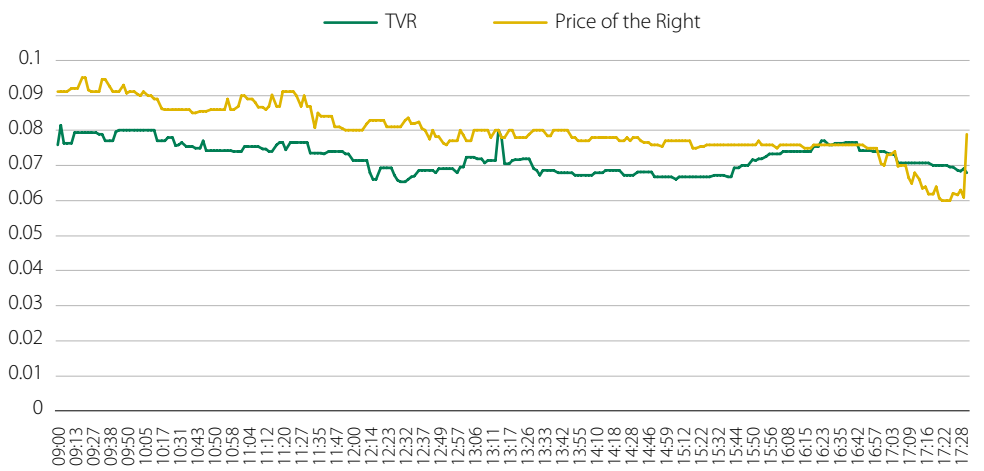
SNIACE, 11/May.



SNIACE, 12/May.

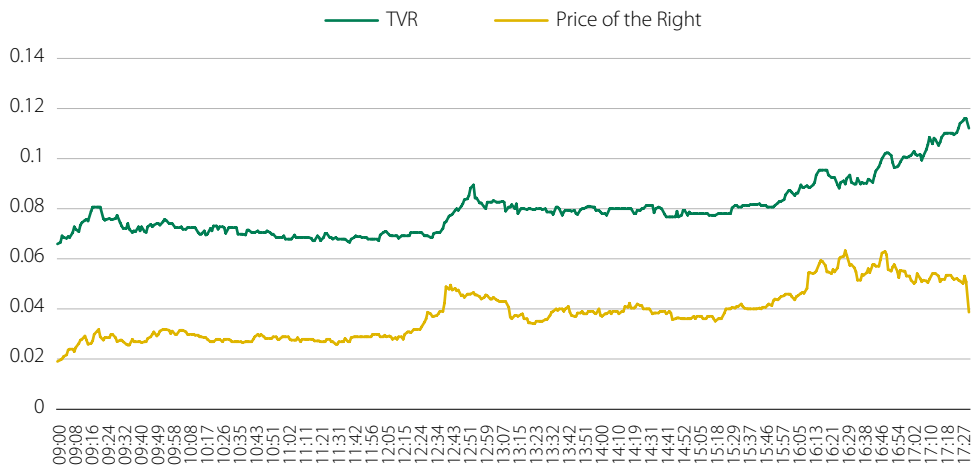


SNIACE, 13/May.

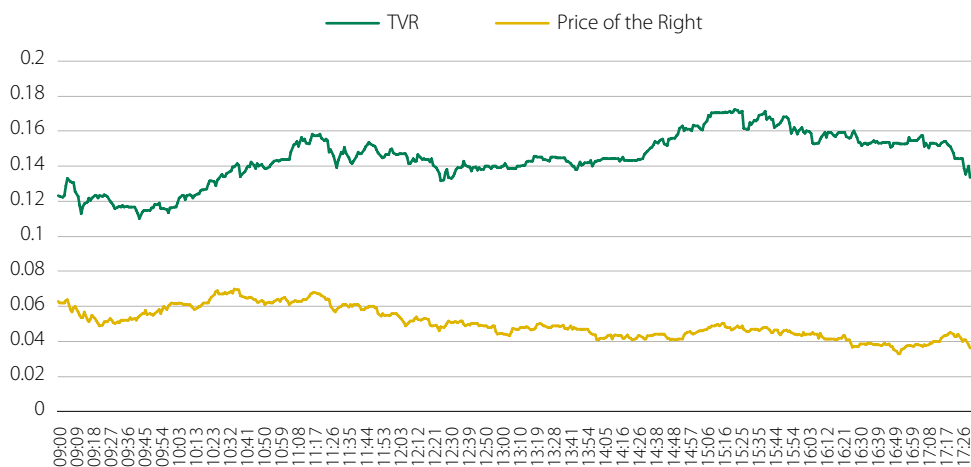


SNIACE, 16/May.





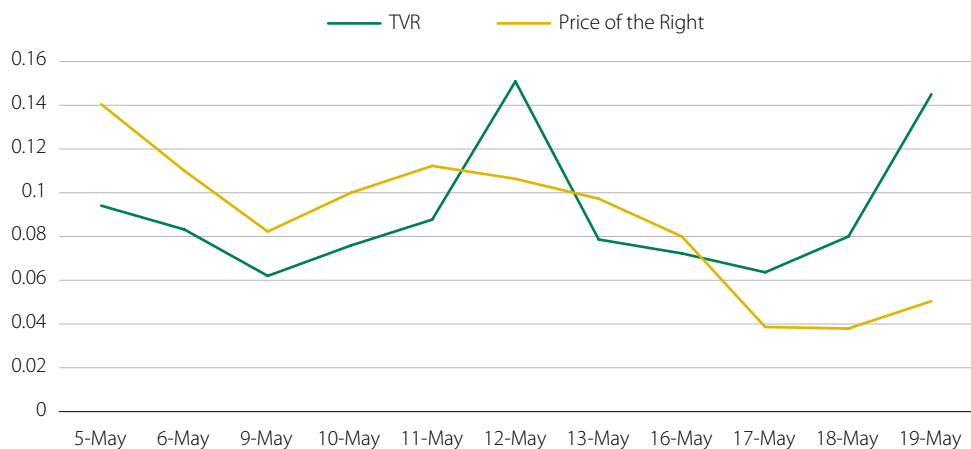
SNIACE, 18/May.

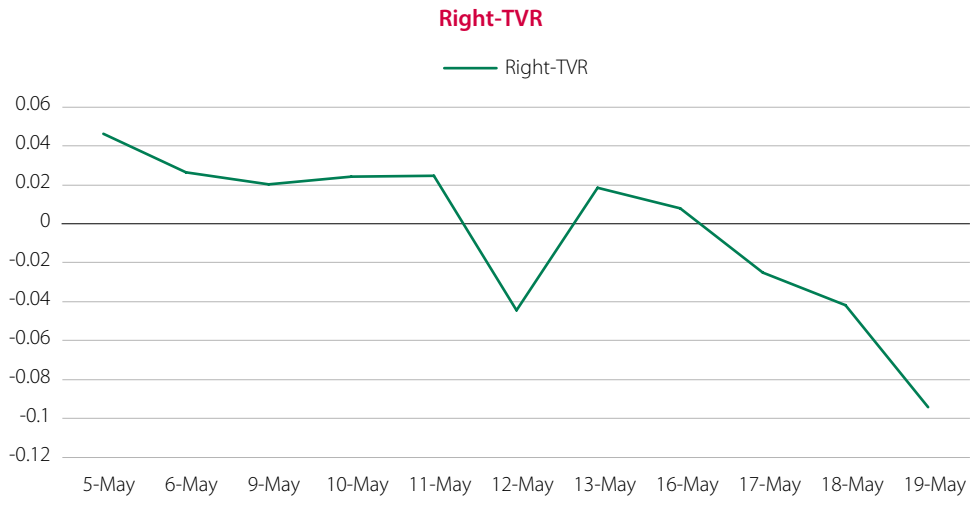


SNIACE, 19/May.

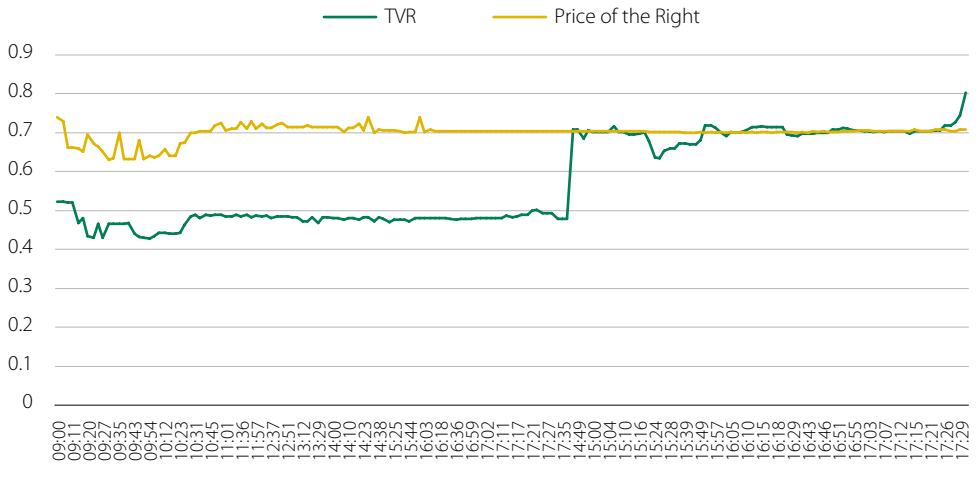
### Theoretical value and price of the subscription rights of SNIACE

Theoretical value of the right (TVR) and price of the right SNIACE

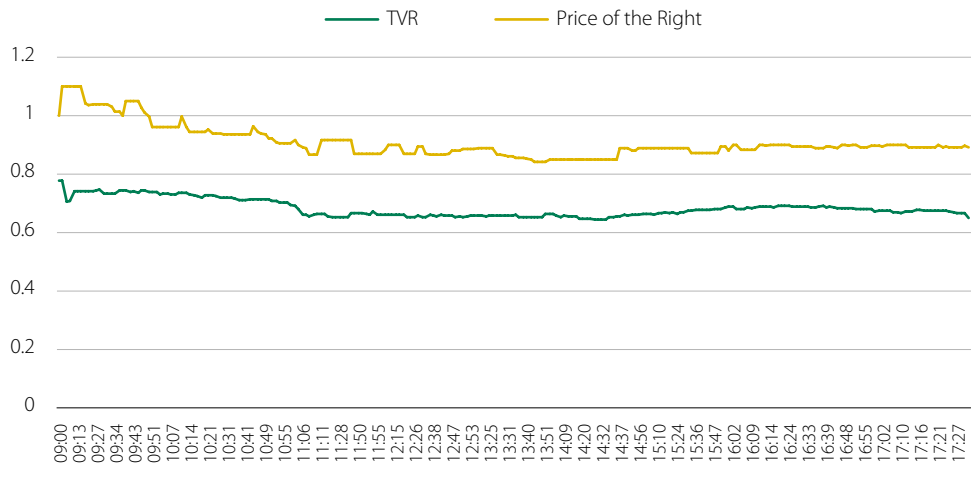




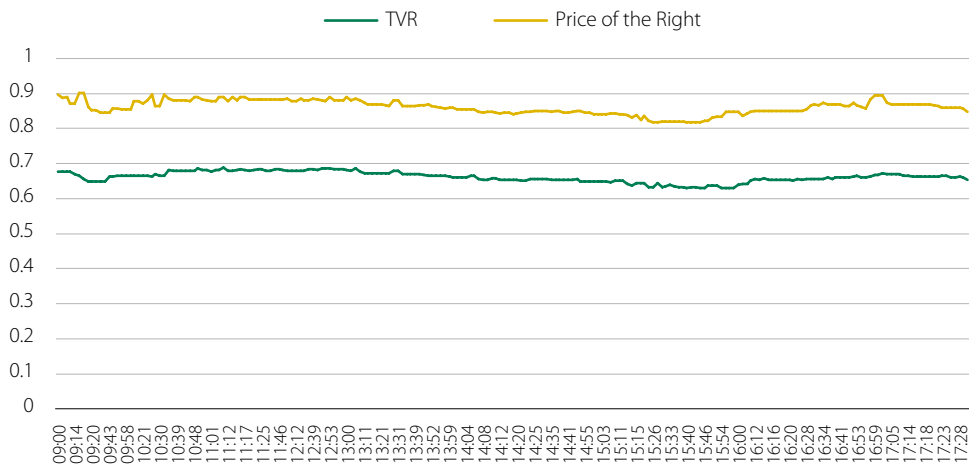
### Hispania SOCIMI: Difference between market value and theoretical value of subscription rights per day



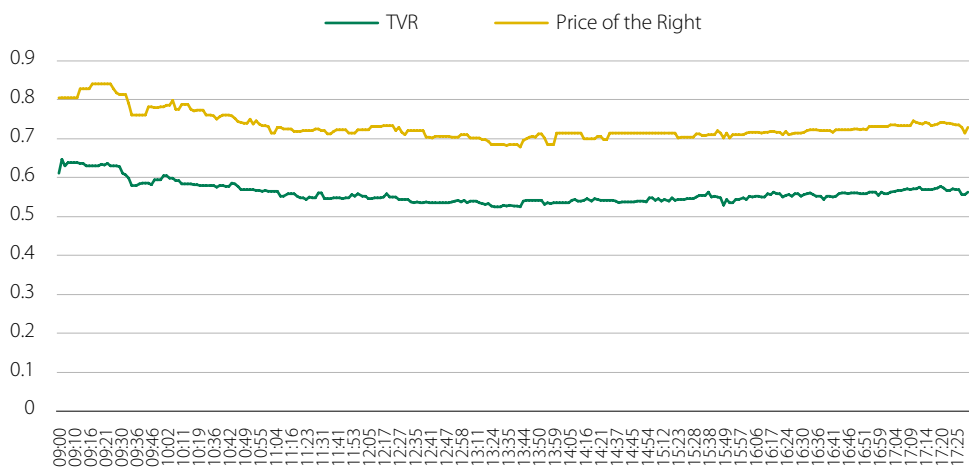
Hispania SOCIMI, 16/May.



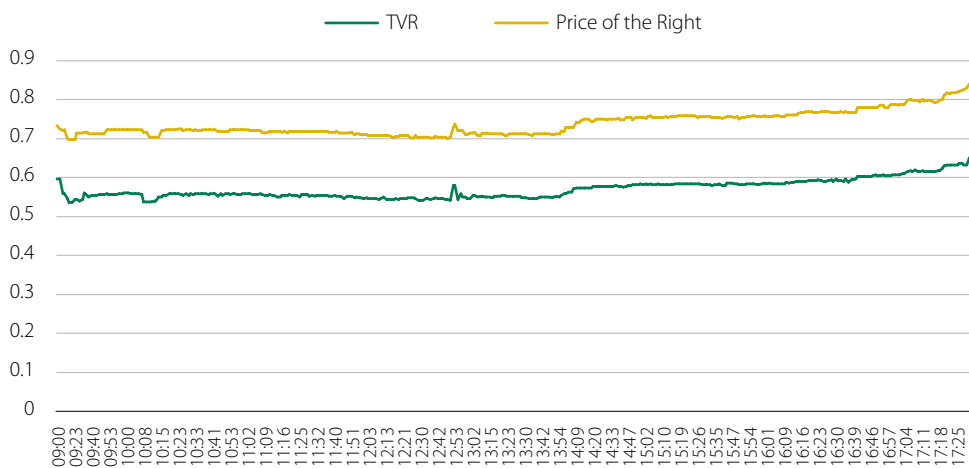
Hispania SOCIMI, 17/May.



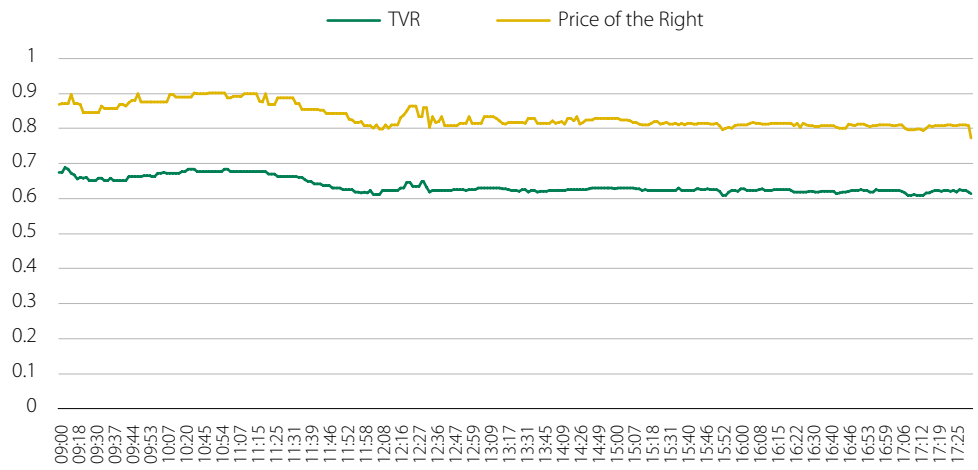
Hispania SOCIMI, 18/May.



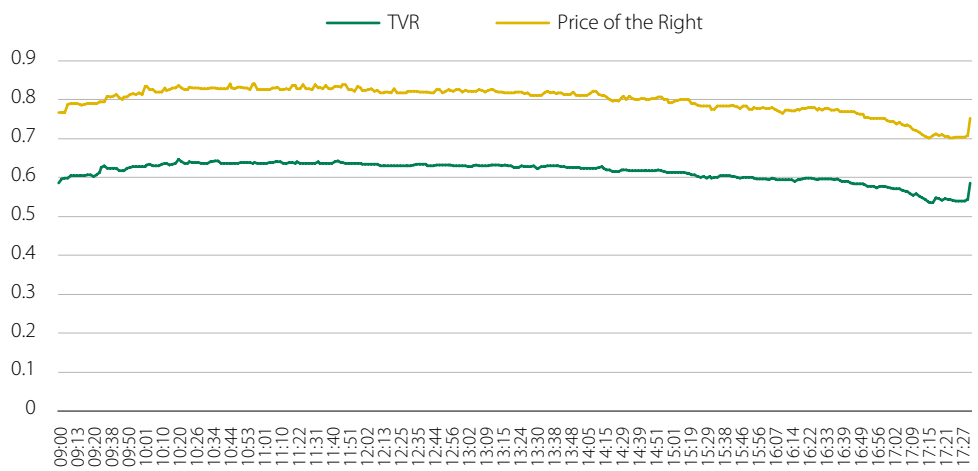
Hispania SOCIMI, 19/May.



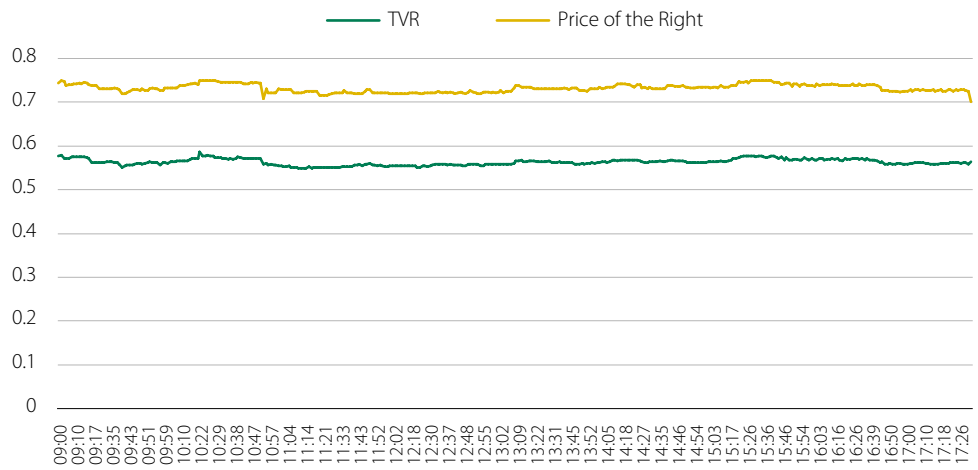
Hispania SOCIMI, 20/May.



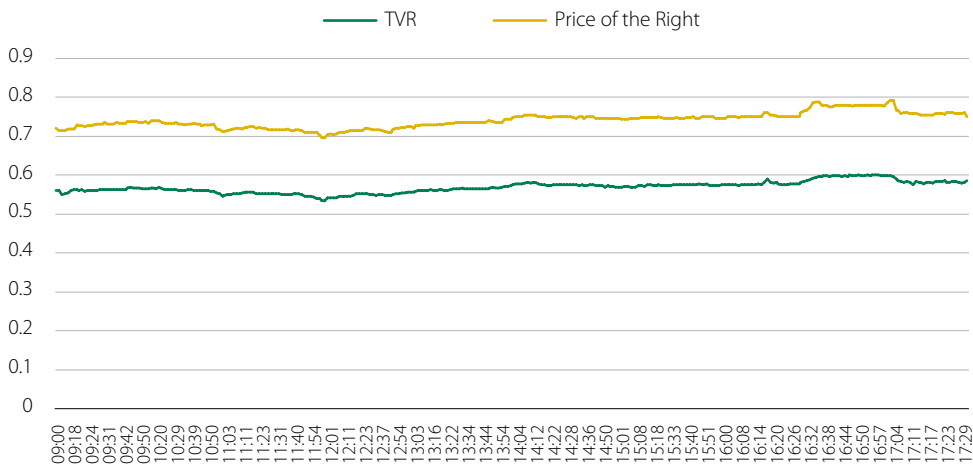
Hispania SOCIMI, 23/May.



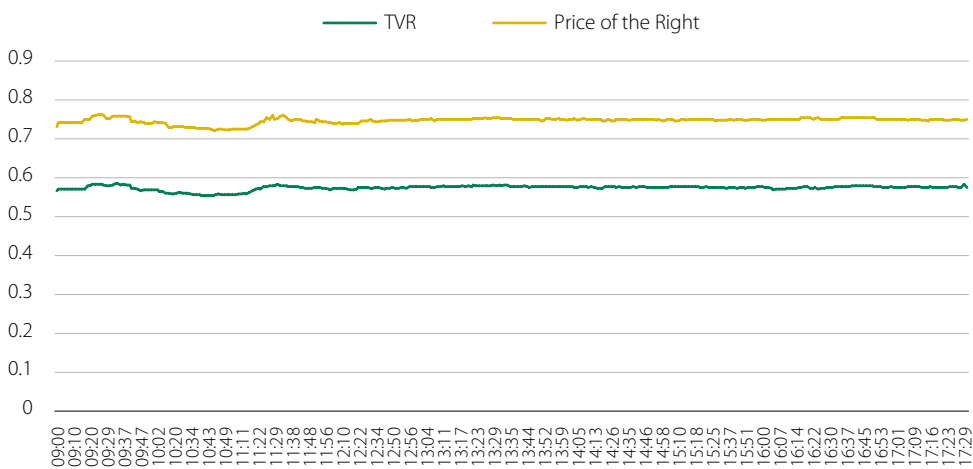
Hispania SOCIMI, 24/May.



Hispania SOCIMI, 25/May.



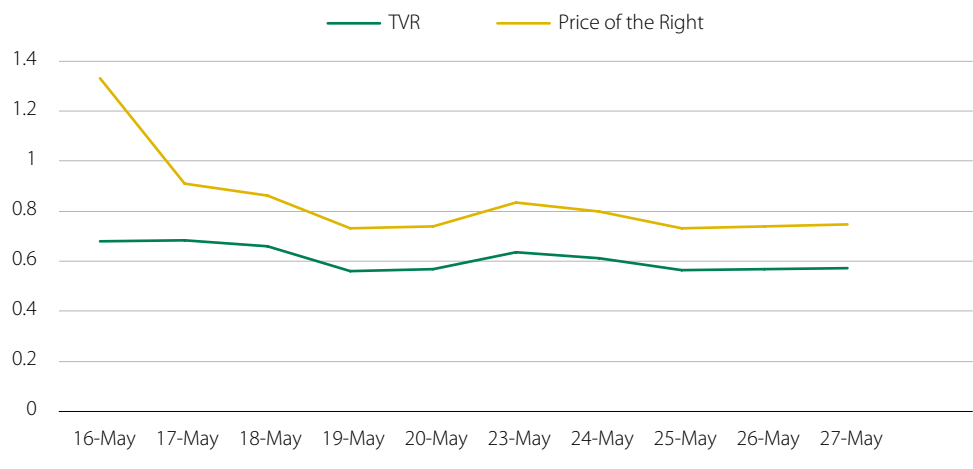
Hispania SOCIMI, 26/May.

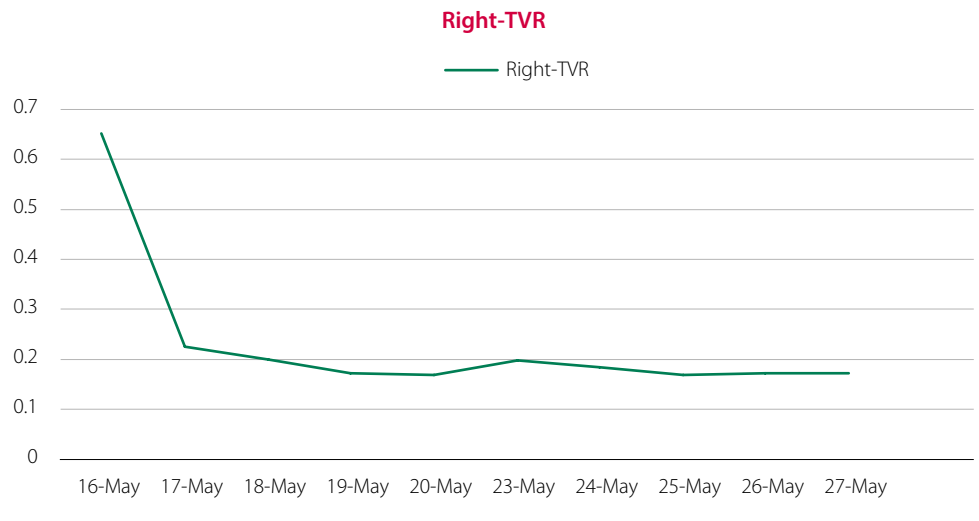


Hispania SOCIMI, 27/May.

### Theoretical value and price of the subscription rights of Hispania SOCIMI

#### Theoretical value of the right (TVR) and price of the right Hispania SOCIMI





### III Legislative annex





New legislation since publication of the CNMV bulletin for the last quarter of 2017 is as follows:

## Spanish legislation

- **Ruling of 6 February 2018**, ordering publication of the Resolution Ratifying Royal Decree-Law 21/2017, of December 29, on urgent measures for the adaptation of Spanish law to European Union regulations on the securities market.
- **CNMV Board Resolution of 8 March 2018**, amending the Resolution of 26 April 2017 on the delegation of powers.

A new paragraph is added, 15 *bis*, on the delegation of powers with regard to the suspension of pre-trade transparency exemptions as a result of the threshold of the volume cap mechanism being exceeded (Article 5 MiFIR).

- **CNMV Circular 1/2018, of 12 March**, on warnings relating to financial instruments.

This Circular is issued under the power attributed to the CNMV to require that the information submitted to investors prior to the acquisition of a financial instrument should include certain warnings relating to the instrument. The aim of this Circular is to specify the warnings to be made relating to their high level of complexity, their eligibility for the bail-in tool and the existence of a significant difference with regard to the current value. To this end, the different types of financial instrument and the nature of the client have been taken into consideration.

The third final provision of Law 9/2012, of 14 November, on the restructuring and resolution of credit institutions, introduced certain amendments to the Securities Market Act 24/1988, of 28 July.

One of these affected Article 79 *bis*(3) - the current Article 210(3) of the recast text of the Securities Market Act - relating, *inter alia*, to information on financial instruments that entities must provide to clients.

This article authorises the CNMV to require that the information given to investors before purchasing a financial instrument should include as many warnings relating to the financial instrument as deemed necessary and, in particular, although not exclusively, warnings highlighting the fact that the financial instrument is not appropriate for non-professional investors due to its complexity.

The aim of this measure is to strengthen investor protection and it supplements other amendments introduced by the aforementioned Law 9/2012, of 14 November, such as those relating to warnings and information for clients set out in Article 79 *bis*(6) and (7) of the Securities Market Act 24/1988, of 28 July - the current Articles 213 and 214 of the recast text of the Securities Market Act - implemented by means of CNMV Circular 3/2013, of 12 June, on the implementation of

certain information obligations relating to the financial instrument appropriateness and suitability test for clients of investment services. The explanatory memorandum of the aforementioned Law 9/2012, of 14 November, stresses that its contents strengthen the CNMV's oversight powers relating to the marketing of investment products by entities, especially with regard to complex products.

This Circular entered into force three months following its publication in the BOE (Official State Gazette).

## European legislation

- **Commission Delegated Regulation (EU) 2018/63**, of 26 September 2017, amending Delegated Regulation (EU) 2017/571, supplementing Directive 2014/65/EU, of the European Parliament and of the Council, with regard to regulatory technical standards on the authorisation, organisational requirements and publication of transactions for data reporting services providers.

Delegated Regulation 2018/63 amends the content of Commission Delegated Regulation (EU) 2017/571, of 2 June 2016, supplementing Directive 2014/65/EU, of the European Parliament and of the Council, with regard to regulatory technical standards on the authorisation, organisational requirements and publication of transactions for data reporting services providers by inserting a new Article 15a relating to the scope of the consolidated tape for bonds, structured finance products, emission allowances and derivatives. This article establishes (i) a list of asset classes whose data must be included in the data stream of consolidated tape providers, and (ii) the hedging ratios that need to be taken into consideration for this purpose.

This Regulation entered into force on the 20th day following that of its publication (17 January 2018) in the Official Journal of the European Union.

- **Commission Delegated Regulation (EU) No. 2018/66 of 29 September 2017**, supplementing Regulation (EU) 2016/1011, of the European Parliament and of the Council, specifying how the nominal amount of financial instruments other than derivatives, the notional amount of derivatives and the net asset value of investment funds are to be assessed.

This Regulation entered into force on the 20th day following that of its publication (17 January 2018) in the Official Journal of the European Union.

- **Commission Regulation (EU) No. 2018/182, of 7 February 2018**, amending Regulation (EC) No. 1126/2008 adopting certain international accounting standards in accordance with Regulation (EC) No. 1606/2002, of the European Parliament and of the Council, as regards International Accounting Standard 28 and International Financial Reporting Standards 1 and 12.

This Regulation entered into force on the 20th day following that of its publication in the Official Journal of the European Union.

- **Commission Regulation (EU) 2018/289, of 26 February 2018**, amending Regulation (EC) No. 1126/2008 adopting certain international accounting standards in accordance with Regulation (EC) No. 1606/2002, of the European Parliament and of the Council, as regards International Financial Reporting Standard (IFRS) 2 ‘Share-based Payment’.

This Regulation shall enter into force on the 20th day following that of its publication in the Official Journal of the European Union.

- **Commission Implementing Regulation (EU) 2018/292, of 26 February 2018**, laying down implementing technical standards with regard to procedures and forms for the exchange of information and assistance between competent authorities according to Regulation (EU) No. 596/2014, of the European Parliament and of the Council, on market abuse.

This Regulation shall enter into force on the day following that of its publication in the Official Journal of the European Union.

- **Regulation (EU) 2018/318, of the European Central Bank, of 22 February 2018**, amending Regulation (EU) No. 1011/2012 concerning statistics on holdings of securities (ECB/2018/7).

This Regulation shall enter into force on 18 October 2018.

- **Commission Regulation (EU) No. 2018/400, of 14 March 2018**, amending Regulation (EC) No. 1126/2008 adopting certain international accounting standards in accordance with Regulation (EC) No. 1606/2002, of the European Parliament and of the Council, as regards International Accounting Standard (IAS) 40.

This Regulation shall enter into force on the 20th day following that of its publication in the Official Journal of the European Union.

## Other

- **Joint press statement by the CNMV and Banco de España on “cryptocurrencies” and “initial coin offerings” (ICOs).**

Through this press statement, the CNMV and the Banco de España report on the following:

- **The current situation of cryptocurrencies and initial coin offerings (ICOs).**

The CNMV and the Banco de España stress that (i) cryptocurrencies, including bitcoin, are not backed by any public authority or by a central bank; (ii) although they can be conceived as an alternative to legal tender, there is no obligation to accept them as a means of payment; (iii) they

have a very limited circulation and have a very significant level of volatility. The CNMV and the Banco de España particularly underline this last point as they highlight the fall in the average bitcoin price of over 65% from the highs of December (16,000 euros) to early February (price lower than 5,500 euros).

They also warned that no cryptocurrency issue or ICO has to date been registered, authorised or verified by any supervisory body in Spain, which prevents its buyers from benefiting from the regulatory guarantees and protections relating to banking or investment products.

- **The duality of the ICO concept, understood as the issuance of cryptocurrencies or the issuance of rights of a diverse nature, referred to as tokens.**

According to the press statement, there are two types of tokens:

- “Security tokens”: these generally provide a share in the future revenues or increased value of the issuing venture or of a business.
- “Utility tokens”: these entitle access to a service or to receive a product, with mention usually made on the occasion of the offering to appreciation and liquidity expectations or to the possibility of trading them on specific markets.

Finally, they suggest that potential buyers or participants in cryptocurrencies or ICOs should bear in mind (a) that this is a non-regulated space; (b) the problems arising from the cross-border nature of these operations; (c) the high risk of loss of the capital invested as a result of the lack of intrinsic value and their strong dependence on technology; (d) their illiquidity and extreme volatility, and (e) the inadequate nature of information, particularly in the case of ICOs.

It should be noted that the European Banking Authority (EBA) and the European Insurance and Occupational Pensions Authority (EIOPA), together with ESMA, agree with the considerations contained in the joint statement, as demonstrated by the document published by ESMA warning consumers of the risks of virtual currencies or cryptocurrencies.

- **CNMV considerations on cryptocurrencies and ICOs addressed to market professionals.**

In addition to the points indicated by the CNMV in the above statement, this document highlights (i) the different methods identified through which cryptocurrencies are marketed or acquired and (ii) the CNMV’s opinion on the treatment that ICOs warrant.

- Categories of cryptocurrency marketing. In addition to “direct” marketing, the CNMV highlights marketing through (i) contracts for differences; (ii) futures, options and other derivatives; (iii) investment funds or other collective investment vehicles that invest in cryptocurrencies, and (iv)

structured bonds whose underlying asset is a cryptocurrency. Furthermore, the CNMV warns that these should not be regarded as the only methods given the constant innovation in products and channels.

- Treatment of ICOs. The CNMV believes that most ICOs should be treated as issues of public offerings of transferable securities as, in its opinion, such operations would fall under the definition of transferable securities provided in Article 2.1[1] of Royal Legislative Decree 4/2015, of 23 October, approving the recast text of the Securities Market Act, in those cases in which the tokens:
  - a) Assign rights or expectations of a share in the potential rise in the value or profitability of businesses or projects or, in general, that they constitute or assign rights equivalent or similar to those inherent to shares, bonds or other financial instruments included in Article 2 of the recast text of the Securities Market Act.
  - b) Entitle access to services or to receive goods or products that are offered, referring explicitly or implicitly to the expectation that the buyer or investor will obtain a profit as a result of a rise in their value or of some remuneration associated with the instrument or mentioning the instrument's liquidity or tradability on equivalent or allegedly similar markets to the securities markets subject to regulation.

The ICOs referred to in (a) and (b) above would therefore be subject to the legislation established for this purpose and, in particular, MiFID II and Directive 2003/71/EC, of the European Parliament and of the Council, of 4 November 2003, on the prospectus to be published when securities are offered to the public or admitted to trading and amending Directive 2001/34/EC, and Directive 2011/61/EU, of the European Parliament and of the Council, of 8 June 2011, on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No. 1060/2009 and (EU) No. 1095/2010.

- **Technical Guide 1/2018** on related-party transactions of collective investment schemes and other transactions of collective investment scheme management companies.

Spanish legislation, like European legislation, accepts related-party transactions by CIS management companies for the CIS that they manage (acquisition of securities issued by entities in their own group, contracting the services provided by entities that are related parties, purchases and sales in which the counterparty is another managed CIS etc.). Nevertheless, given the possible conflicts of interest posed by such transactions, they may only be made in the sole interest of the CIS and at prices or under conditions that are the same as or better than those of the market.

In addition, CIS management companies must have a formal internal procedure in place to ensure that said requirements are met and there must be a person or body responsible for this matter.

The approved Technical Guide contains criteria resulting from the CNMV's supervisory experience on the definition of related parties and related-party transactions, as well as how different types of related-party transactions should be treated.

It therefore identifies related-party transactions for which prior authorisation is required and those which, due to their repetitive nature or immateriality, may be subject to simple *a posteriori* control. Some of the situations specifically referred to in this Technical Guide are as follows:

- Applications (transactions in which a CIS has another CIS or client managed by the same CIS management company as counterparty). The CNMV considers that these should be extremely exceptional cases bearing in mind that it is difficult to justify contrasting decisions taken by one single entity for different clients.
- The sale by CIS of securities acquired from issues of entities that form part of its own group, which the CNMV believes should also be reported, case-by-case, to the body responsible for related-party transactions in order to strengthen appropriate management of conflicts of interest that may arise upon acquisition of such securities.

Similarly, the CNMV provides clarification to CIS management companies by stating that it believes equivalent treatment to that applied to related-party transactions should also be given to certain comparable transactions that are not expressly legally classified as related-party transactions with promoters of the funds that they manage or which affect clients of portfolio management or advisory services.

**IV Statistics Annex**





# 1 Markets

## 1.1 Equity

### Share issues and public offerings<sup>1</sup>

TABLE 1.1

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>2</sup>
<b>NO. OF ISSUERS</b>								
Total	50	45	46	16	16	18	17	10
Capital increases	45	45	44	15	13	18	17	9
Primary offerings	0	3	3	1	1	1	1	0
Bonus issues	17	18	12	4	2	7	3	4
Of which, scrip dividend	12	12	9	4	2	5	2	4
Capital increases by conversion	6	8	5	1	1	1	3	0
For non-monetary consideration	3	3	8	3	2	2	2	2
With pre-emptive subscription rights	12	11	8	2	1	2	3	2
Without trading warrants	16	11	15	5	6	5	7	2
Secondary offerings	6	2	4	2	3	0	1	1
<b>NO. OF ISSUES</b>								
Total	111	81	89	27	18	19	25	14
Capital increases	99	79	82	25	14	19	24	13
Primary offering	0	4	4	1	1	1	1	0
Bonus issues	28	25	16	4	2	7	3	4
Of which, scrip dividend	22	19	13	4	2	5	2	4
Capital increases by conversion	23	17	6	1	1	1	3	0
For non-monetary consideration	3	4	12	3	3	2	4	3
With pre-emptive subscription rights	15	11	8	2	1	2	3	2
Without trading warrants	30	18	36	14	6	6	10	4
Secondary offerings	12	2	7	2	4	0	1	1
<b>CASH VALUE (million euro)</b>								
Total	37,065.5	20,251.7	32,538.1	8,723.5	11,067.7	10,090.2	2,656.7	3,860.2
Capital increases	28,733.9	19,745.1	29,593.6	7,364.2	10,049.8	10,090.2	2,089.5	3,214.6
Primary offerings	0.0	807.6	956.2	100.0	687.5	68.8	100.0	0.0
Bonus issues	9,627.8	5,898.3	3,807.3	1,084.4	850.3	1,152.5	720.1	1,336.2
Of which, scrip dividend	9,627.8	5,898.3	3,807.3	1,084.4	850.3	1,152.5	720.1	1,336.2
Capital increases by conversion	1,868.7	2,343.9	1,648.8	0.1	23.6	1,499.7	125.5	0.0
For non-monetary consideration <sup>3</sup>	365.2	1,791.7	8,469.3	58.0	8,122.6	238.8	49.9	1,179.1
With pre-emptive subscription rights	7,932.6	6,513.3	7,831.4	185.3	11.7	7,102.9	531.6	566.3
Without trading warrants	8,939.7	2,390.2	6,880.5	5,936.4	354.1	27.6	562.4	133.0
Secondary offerings	8,331.6	506.6	2,944.5	1,359.3	1,018.0	0.0	567.3	645.7
<b>NOMINAL VALUE (million euro)</b>								
Total	4,253.4	4,206.1	3,165.1	731.5	987.4	1,176.7	269.4	1,079.1
Capital increases	3,153.3	4,189.8	2,662.8	353.8	868.2	1,176.7	264.1	797.4
Primary offerings	0.0	28.2	749.2	60.8	625.0	62.5	0.9	0.0
Bonus issues	946.6	877.8	324.3	106.1	51.0	109.8	57.4	122.0
Of which, scrip dividend	785.8	708.0	299.1	106.1	51.0	92.2	49.7	122.0
Capital increases by conversion	89.6	648.0	182.8	0.0	17.2	154.3	11.3	0.0
For non-monetary consideration	146.6	248.9	181.9	17.6	70.8	80.7	12.8	220.7
With pre-emptive subscription rights	1,190.7	1,403.0	882.0	54.5	11.7	759.6	56.3	442.6
Without trading warrants	779.8	983.9	342.6	114.8	92.5	9.9	125.4	12.0
Secondary offerings	1,100.2	16.3	502.3	377.7	119.2	0.0	5.4	281.7
<b>Pro memoria: transactions MAB<sup>4</sup></b>								
No. of Issuers	16	15	13	2	6	3	3	1
No. of Issues	18	21	15	2	6	3	4	2
Cash value (million euro)	177.8	219.7	129.9	2.2	84.2	17.3	26.2	9.2
Capital increases	177.8	219.7	129.9	2.2	84.2	17.3	26.2	9.2
Of which, primary offerings	21.6	9.7	17.1	0.0	14.1	0.0	3.0	0.0
Secondary offerings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1 Registered transactions at the CNMV. Does not include data from MAB, ETF or Latibex.

2 Available data: February 2018.

3 Capital increases for non-monetary consideration are valued at market prices.

4 Unregistered transactions at the CNMV. Sources: BME and CNMV.

## Companies listed<sup>1</sup>

TABLE 1.2

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>2</sup>
Total electronic market <sup>3</sup>	129	130	134	131	131	133	134	133
Of which, without Nuevo Mercado	129	130	134	131	131	133	134	133
Of which, Nuevo Mercado	0	0	0	0	0	0	0	0
Of which, foreign companies	7	7	7	7	7	7	7	7
Second Market	5	5	4	5	5	4	4	4
Madrid	2	2	1	2	2	1	1	1
Barcelona	3	3	3	3	3	3	3	3
Bilbao	0	0	0	0	0	0	0	0
Valencia	0	0	0	0	0	0	0	0
Open outcry	18	14	12	14	13	12	12	11
Madrid	8	5	4	5	5	4	4	4
Barcelona	10	8	6	8	7	6	6	6
Bilbao	6	5	4	5	5	4	4	4
Valencia	3	3	3	3	3	3	3	3
MAB <sup>4</sup>	3,429	3,336	2,965	3,235	3,109	3,040	2,965	2,926
Latibex	21	20	20	20	20	20	20	20

1 Data at the end of period.

2 Available data: February 2018.

3 Without ETFs (Exchange Traded Funds).

4 Alternative Stock Market.

## Capitalisation<sup>1</sup>

TABLE 1.3

Million euro	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>2</sup>
Total electronic market <sup>3</sup>	766,335.7	779,123.8	877,867.6	869,728.4	885,440.4	892,280.4	877,867.6	874,628.5
Of which, without Nuevo Mercado	766,335.7	779,123.8	877,867.6	869,728.4	885,440.4	892,280.4	877,867.6	874,628.5
Of which, Nuevo Mercado	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Of which, foreign companies <sup>4</sup>	141,695.3	151,043.2	178,620.3	168,755.6	169,579.3	178,272.9	178,620.3	186,094.8
Ibex 35	477,521.1	484,059.2	534,250.1	542,678.3	545,738.5	551,761.2	534,250.1	524,562.7
Second Market	20.6	114.1	49.9	106.7	99.9	46.2	49.9	49.7
Madrid	20.6	72.0	8.7	74.1	62.3	8.7	8.7	8.7
Barcelona	0.0	42.1	41.2	32.6	37.6	37.6	41.2	41.0
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	1,040.3	1,291.6	1,288.5	1,371.4	1,269.4	1,367.5	1,288.5	1,400.4
Madrid	296.9	289.9	165.9	270.2	248.2	250.5	165.9	168.9
Barcelona	887.7	1,136.6	1,134.3	1,215.1	1,113.3	1,211.4	1,134.3	1,246.4
Bilbao	943.3	54.0	211.3	319.0	289.7	318.5	211.3	211.9
Valencia	150.0	349.2	54.0	55.4	53.6	52.0	54.0	56.4
MAB <sup>5,6</sup>	0.0	0.0	0.0	39,711.8	39,625.5	41,228.1	43,804.8	41,449.1
Latibex	37,258.5	38,580.8	43,804.8	212,625.4	194,968.9	220,350.0	215,277.7	248,522.2

1 Data at the end of period.

2 Available data: February 2018.

3 Without ETFs (Exchange Traded Funds).

4 Foreign companies capitalisation includes their entire shares, whether they are deposited in Spain or not.

5 Calculated only with outstanding shares, not including treasury shares, because capital stock is not reported until the end of the year.

6 Alternative Stock Market.

## Trading

TABLE 1.4

Million euro	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
Total electronic market <sup>2</sup>	938,396.7	635,797.8	640,293.7	155,700.1	202,525.7	126,429.1	155,638.9	60,335.7
Of which, without Nuevo Mercado	938,396.7	635,797.8	640,293.7	155,700.1	202,525.7	126,429.1	155,638.9	60,335.7
Of which, Nuevo Mercado	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Of which, foreign companies	12,417.7	6,018.0	6,908.0	2,535.4	1,911.0	1,318.6	1,143.0	574.4
Second Market	13.8	3.1	0.7	0.1	0.4	0.0	0.2	0.1
Madrid	13.7	2.7	0.5	0.1	0.3	0.0	0.1	0.0
Barcelona	0.1	0.4	0.3	0.1	0.1	0.0	0.1	0.1
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	246.1	7.4	8.1	4.7	0.8	0.5	2.2	0.5
Madrid	19.4	3.2	2.3	1.6	0.7	0.1	0.0	0.0
Barcelona	219.1	4.2	6.2	3.1	0.6	0.4	2.1	0.5
Bilbao	7.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Valencia	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAB <sup>3</sup>	6,441.7	5,055.1	4,985.6	1,396.0	1,261.8	1,010.5	1,317.4	664.6
Latibex	258.7	156.4	130.8	71.2	31.3	12.3	16.1	22.4

1 Available data: February 2018.

2 Without ETFs (Exchange Traded Funds).

3 Alternative Stock Market.

## Trading on the electronic market by type of transaction<sup>1</sup>

TABLE 1.5

Million euro	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>2</sup>
Regular trading	903,397.2	619,351.6	619,108.6	150,670.1	196,224.5	122,853.6	149,360.4	57,979.6
Orders	475,210.0	346,980.8	335,917.3	86,616.7	95,087.3	73,585.3	80,628.0	37,765.2
Put-throughs	96,187.7	68,990.5	51,315.9	12,962.0	14,615.0	11,359.6	12,379.5	5,681.0
Block trades	331,999.5	203,380.2	231,875.3	51,091.4	86,522.2	37,908.8	56,353.0	14,533.5
Off-hours	3,137.9	1,996.2	2,373.8	500.8	500.7	411.2	961.1	193.2
Authorised trades	14,885.5	12,667.0	9,265.3	2,795.2	2,803.5	1,507.3	2,159.4	389.0
Art. 36.1 SML trades	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tender offers	4,360.1	788.4	389.9	56.1	184.9	146.6	2.3	843.0
Public offerings for sale	4,266.8	777.5	2,288.1	0.0	1,000.7	137.2	1,150.2	710.2
Declared trades	203.6	37.3	0.0	0.0	0.0	0.0	0.0	0.0
Options	5,964.2	5,408.3	4,462.2	943.5	1,088.4	930.4	1,499.9	26.3
Hedge transactions	2,181.4	1,833.8	2,405.7	734.4	723.0	442.7	505.6	194.4

1 Without ETFs (Exchange Traded Funds).

2 Available data: February 2018.

## 1.2 Fixed-income

### Gross issues registered at the CNMV

TABLE 1.6

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
<b>NO. OF ISSUERS</b>								
Total	49	51	48	19	17	16	23	14
Mortgage covered bonds	13	13	9	3	5	6	4	3
Territorial covered bonds	3	3	1	0	1	0	0	0
Non-convertible bonds and debentures	16	16	16	9	8	6	9	8
Convertible bonds and debentures	1	0	0	0	0	0	0	0
Backed securities	16	20	21	6	4	2	12	3
Commercial paper	16	14	13	4	1	5	3	2
Of which, asset-backed	1	1	1	1	0	0	0	1
Of which, non-asset-backed	15	13	12	3	1	5	3	1
Other fixed-income issues	0	1	1	0	0	1	0	0
Preference shares	0	0	1	0	1	0	0	0
<b>NO. OF ISSUES</b>								
Total	415	399	378	115	91	69	103	64
Mortgage covered bonds	34	41	28	3	8	7	10	7
Territorial covered bonds	6	4	1	0	1	0	0	0
Non-convertible bonds and debentures	318	277	276	93	73	52	58	49
Convertible bonds and debentures	1	0	0	0	0	0	0	0
Backed securities	40	61	58	15	7	4	32	6
Commercial paper <sup>2</sup>	16	15	13	4	1	5	3	2
Of which, asset-backed	1	1	1	1	0	0	0	1
Of which, non-asset-backed	15	14	12	3	1	5	3	1
Other fixed-income issues	0	1	1	0	0	1	0	0
Preference shares	0	0	1	0	1	0	0	0
<b>NOMINAL AMOUNT (million euro)</b>								
Total	136,607.3	139,028.2	109,487.4	25,428.9	23,049.9	13,156.3	47,852.3	13,561.4
Mortgage covered bonds	31,375.0	31,642.5	29,823.7	2,250.0	9,050.0	5,175.0	13,348.7	5,125.0
Territorial covered bonds	10,400.0	7,250.0	350.0	0.0	350.0	0.0	0.0	0.0
Non-convertible bonds and debentures	39,099.9	40,170.4	30,006.2	13,485.7	2,763.1	1,125.4	12,632.0	753.3
Convertible bonds and debentures	53.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Backed securities	28,369.6	35,504.9	29,415.4	6,525.0	3,594.0	2,968.8	16,327.6	5,249.0
Commercial paper <sup>3</sup>	27,309.6	22,960.4	17,911.2	3,168.2	6,292.9	2,906.1	5,543.9	2,434.2
Of which, asset-backed	2,420.0	1,880.0	1,800.0	0.0	1,000.0	0.0	800.0	0.0
Of which, non-asset-backed	24,889.6	21,080.4	16,111.2	3,168.2	5,292.9	2,906.1	4,743.9	2,434.2
Other fixed-income issues	0.0	1,500.0	981.0	0.0	0.0	981.0	0.0	0.0
Preference shares	0.0	0.0	1,000.0	0.0	1,000.0	0.0	0.0	0.0
<b>Pro memoria:</b>								
Subordinated issues	5,452.2	4,278.7	6,504.6	1,519.5	1,956.0	1,370.2	1,658.9	606.5
Underwritten issues	0.0	421.0	0.0	0.0	0.0	0.0	0.0	0.0

1 Available data: February 2018.

2 Shelf registrations.

3 The figures for commercial paper refer to the amount placed.

### Issues admitted to trading on AIAF<sup>1</sup>

TABLE 1.7

Nominal amount in million euro	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>2</sup>
Total	145,890.9	130,141.0	121,556.6	46,071.9	24,669.4	11,621.6	39,193.6	23,687.0
Commercial paper	27,455.3	22,770.6	18,388.9	3,053.3	6,429.4	2,923.6	5,982.5	2,432.6
Bonds and debentures	47,616.4	31,723.0	43,182.3	36,668.6	2,485.1	1,140.2	2,888.5	11,014.4
Mortgage covered bonds	31,375.0	31,392.5	30,000.0	2,500.0	9,050.0	3,675.0	14,775.0	5,125.0
Territorial covered bonds	10,400.0	7,250.0	350.0	0.0	350.0	0.0	0.0	0.0
Backed securities	29,044.2	35,504.9	28,635.4	3,850.0	5,355.0	3,882.8	15,547.6	5,115.0
Preference shares	0.0	0.0	1,000.0	0.0	1,000.0	0.0	0.0	0.0
Matador bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other fixed-income issues	0.0	1,500.0	0.0	0.0	0.0	0.0	0.0	0.0

1 Includes only corporate bonds.

2 Available data: February 2018.

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
<b>NO. OF ISSUERS</b>								
Total	388	375	362	366	364	354	362	369
Corporate bonds	387	374	342	365	365	355	342	343
Commercial paper	16	14	14	14	14	15	14	12
Bonds and debentures	64	52	48	50	49	50	48	50
Mortgage covered bonds	44	43	41	43	43	41	41	41
Territorial covered bonds	9	9	7	6	7	7	7	
Backed securities	278	276	262	277	277	268	262	264
Preference shares	13	9	4	7	5	5	4	4
Matador bonds	7	6	6	6	6	6	6	6
Government bonds	1	1	20	1	1	1	20	26
Letras del Tesoro	1	1	1	1	1	1	1	1
Long Government bonds	1	1	1	1	1	1	1	1
Regional Governments debt	-	-	11	-	-	-	11	13
Foreign public debt	-	-	-	-	-	-	-	3
Other public debt	-	-	7	-	-	-	7	8
<b>NO. OF ISSUES</b>								
Total	2,723	2,637	2,468	2,523	2,488	2,383	2,468	2,545
Corporate bonds	2,531	2,433	2,084	2,319	2,283	2,179	2,084	2,060
Commercial paper	392	351	179	278	273	210	179	148
Bonds and debentures	882	856	764	836	801	789	764	772
Mortgage covered bonds	238	231	218	221	223	221	218	216
Territorial covered bonds	32	29	24	25	26	24	24	24
Backed securities	966	948	889	948	949	924	889	890
Preference shares	16	12	4	5	5	5	4	4
Matador bonds	7	6	6	6	6	6	6	6
Government bonds	193	204	384	204	205	204	384	485
Letras del Tesoro	12	12	12	12	12	12	12	12
Long Government bonds	181	192	226	192	193	192	226	230
Regional Governments debt	-	-	133	-	-	-	133	151
Foreign public debt	-	-	-	-	-	-	-	75
Other public debt	-	-	13	-	-	-	13	17
<b>OUTSTANDING BALANCE<sup>2</sup></b> (million euro)								
Total	1,386,289.8	1,408,556.6	1,466,964.4	1,422,127.2	1,432,584.5	1,431,569.8	1,466,964.4	2,578,878.6
Corporate bonds	534,088.9	531,056.9	493,629.6	511,128.8	511,257.9	500,673.2	493,629.6	496,365.7
Commercial paper	15,172.9	16,637.4	11,978.9	13,874.9	14,512.2	13,047.8	11,978.9	11,110.7
Bonds and debentures	74,082.2	85,477.8	70,127.7	83,394.1	82,059.7	80,566.5	70,127.7	75,608.4
Mortgage covered bonds	194,072.7	180,677.5	181,308.7	173,111.7	178,061.7	178,686.7	181,308.7	181,523.0
Territorial covered bonds	27,586.3	29,387.3	23,862.3	25,612.3	25,962.3	23,862.3	23,862.3	23,862.3
Backed securities	222,100.4	217,992.1	204,570.0	214,309.9	208,866.1	202,713.9	204,570.0	202,479.4
Preference shares	627.4	497.8	1,395.0	439.0	1,409.0	1,409.0	1,395.0	1,395.0
Matador bonds	447.1	386.9	386.9	386.9	386.9	386.9	386.9	386.9
Government bonds	852,200.9	877,499.6	973,334.7	910,998.4	921,326.6	930,896.6	973,334.7	2,082,512.8
Letras del Tesoro	82,435.4	81,037.1	78,835.2	80,187.7	77,061.8	75,232.3	78,835.2	74,926.8
Long Government bonds	769,765.5	796,462.5	864,059.7	830,810.8	844,264.8	855,664.3	864,059.7	880,070.0
Regional Governments debt	-	-	28,620.8	-	-	-	28,620.8	30,937.2
Foreign public debt	-	-	-	-	-	-	-	1,093,949.8
Other public debt	-	-	1,819.1	-	-	-	1,819.1	2,629.1

1 Available data: February 2018.

2 Nominal amount.

## AIAF. Trading

TABLE 1.9

Nominal amount in million euro	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
<b>BY TYPE OF ASSET</b>								
Total	521,853.7	169,658.2	68,422.0	31,697.2	27,276.5	9,223.0	225.4	10,951.7
Corporate bonds	521,590.4	169,534.0	68,297.4	31,668.5	27,243.2	9,196.4	189.3	139.9
Commercial paper	31,346.2	20,684.3	7,144.4	3,805.9	1,721.1	1,617.3	0.0	0.0
Bonds and debentures	78,120.5	27,795.6	15,839.5	8,546.0	5,015.9	2,088.4	189.3	138.0
Mortgage covered bonds	187,201.7	79,115.6	24,936.4	10,836.0	10,513.5	3,586.8	0.0	0.0
Territorial covered bonds	46,711.4	5,329.3	381.7	367.0	14.7	0.0	0.0	0.0
Backed securities	177,844.1	36,554.9	18,502.5	8,095.5	8,632.8	1,774.2	0.0	1.9
Preference shares	295.5	43.1	1,482.3	7.5	1,345.2	129.7	0.0	0.1
Matador bonds	71.1	11.1	10.7	10.7	0.0	0.0	0.0	0.0
Government bonds	263.3	124.2	124.6	28.6	33.2	26.6	36.1	10,811.8
Letras del Tesoro	30.2	8.5	4.2	0.2	3.7	0.1	0.1	56.1
Long Government bonds	233.1	115.8	120.4	28.4	29.5	26.5	36.0	10,752.6
Regional Governments debt	–	–	0.0	–	–	–	0.0	3.1
Foreign public debt	–	–	–	–	–	–	–	0.0
Other public debt	–	–	0.0	–	–	–	0.0	0.0
<b>BY TYPE OF TRANSACTION</b>								
Total	521,853.7	169,658.3	68,422.0	31,697.1	27,276.5	9,223.0	225.4	10,951.7
Outright	239,086.8	127,643.7	57,723.9	25,722.2	24,784.8	6,991.5	225.4	10,951.7
Repos	7,144.5	4,143.7	671.6	485.2	140.3	46.1	0.0	0.0
Sell-buybacks/Buy-sellbacks	267,875.7	37,870.9	10,026.5	5,489.7	2,351.4	2,185.5	0.0	0.0

1 Available data: February 2018.

## AIAF. Third-party trading. By purchaser sector

TABLE 1.10

Nominal amount in million euro	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
Total	193,694.8	117,373.0	49,230.2	21,523.7	21,360.4	6,123.9	222.2	10,498.7
Non-financial companies	22,747.1	7,119.3	1,492.6	732.3	408.9	351.4	0.0	0.0
Financial institutions	95,467.1	63,048.2	23,402.5	10,506.3	9,375.4	3,298.6	222.2	10,498.7
Credit institutions	74,196.0	46,583.9	15,363.2	7,618.2	5,592.3	1,967.1	185.6	130.9
IICs <sup>2</sup> , insurance and pension funds	8,835.4	8,525.2	4,337.8	2,079.5	1,605.2	653.1	0.0	0.0
Other financial institutions	12,435.7	7,939.1	3,701.5	808.6	2,178.0	678.3	36.6	10,367.8
General government	10,414.4	4,969.7	3,196.3	1,488.3	1,405.8	302.1	0.0	0.0
Households and NPISHs <sup>3</sup>	1,575.2	1,076.0	256.6	182.4	55.6	18.5	0.0	0.0
Rest of the world	63,491.1	41,159.9	20,882.3	8,614.3	10,114.7	2,153.3	0.0	0.0

1 Available data: February 2018.

2 IIC: Institución de Inversión Colectiva / CIS: Collective Investment Scheme.

3 Non-profit institutions serving households.

## Equity markets. Issuers, issues and outstanding balances

TABLE 1.11

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
<b>NO. OF ISSUERS</b>								
Total	20	17	15	17	17	17	15	15
Private issuers	10	7	7	7	7	7	7	7
Non-financial companies	0	0	0	0	0	0	0	0
Financial institutions	10	7	7	7	7	7	7	7
General government <sup>2</sup>	10	10	8	10	10	10	8	8
Regional governments	2	2	2	2	2	2	2	2
<b>NO. OF ISSUES</b>								
Total	103	75	64	72	69	68	64	65
Private issuers	43	26	24	25	24	24	24	24
Non-financial companies	0	0	0	0	0	0	0	0
Financial institutions	43	26	24	25	24	24	24	24
General government <sup>2</sup>	60	49	40	47	45	44	40	41
Regional governments	25	23	22	23	24	23	22	22
<b>OUTSTANDING BALANCES<sup>3</sup> (million euro)</b>								
Total	11,702.2	10,203.4	9,718.0	11,572.7	10,361.7	9,983.6	9,718.0	9,692.3
Private issuers	1,383.3	899.4	760.6	885.1	831.2	796.4	760.6	738.7
Non-financial companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial institutions	1,383.3	899.4	760.6	885.1	831.2	796.4	760.6	738.7
General government <sup>2</sup>	10,319.0	9,304.0	8,957.4	9,315.3	9,530.5	9,187.2	8,957.4	8,953.6
Regional governments	9,320.2	8,347.6	8,193.1	8,347.6	8,572.6	8,333.1	8,193.1	8,193.1

1 Available data: February 2018.

2 Without public book-entry debt.

3 Nominal amount.

## Trading on equity markets

TABLE 1.12

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
Nominal amounts in million euro								
Electronic market	19.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Open outcry	2,050.2	1,673.0	0.0	0.0	0.0	0.0	0.0	0.0
Madrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Barcelona	2,050.2	1,673.0	0.0	0.0	0.0	0.0	0.0	0.0
Bilbao	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Valencia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public book-entry debt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Regional governments debt	22,169.0	3,103.5	0.0	0.0	0.0	0.0	0.0	0.0

1 Available data: February 2018.

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

TABLE 1.13

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
Nominal amounts in million euro								
Total	129,366.0	165,472.0	131,475.0	46,843.0	30,714.0	22,979.0	30,939.0	21,471.0
Outright	129,366.0	165,472.0	131,475.0	46,843.0	30,714.0	22,979.0	30,939.0	21,471.0
Sell-buybacks/Buy-sellbacks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1 Available data: February 2018.

## 1.3 Derivatives and other products

### 1.3.1 Financial derivatives markets: MEFF

#### Trading on MEFF

TABLE 1.14

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
Number of contracts								
Debt products	8,012	360	0	0	0	0	0	0
Debt futures <sup>2</sup>	8,012	360	0	0	0	0	0	0
Ibex 35 products <sup>3,4</sup>	8,279,939	7,468,299	8,033,835	1,649,245	1,987,953	1,884,123	2,512,513	1,513,417
Ibex 35 plus futures	7,384,896	6,836,500	6,268,290	1,522,880	1,477,189	1,441,668	1,826,553	1,138,460
Ibex 35 mini futures	318,129	249,897	1,284,050	37,201	409,501	348,633	488,715	289,326
Ibex 35 dividend impact futures	32,499	58,044	43,372	8,780	13,332	6,963	14,297	12,552
Ibex 35 sectorals futures	–	1,619	7,753	855	1,740	1,530	3,628	639
Call mini options	325,479	169,871	206,843	35,945	42,028	41,606	87,265	40,877
Put mini options	218,937	152,368	223,527	43,585	44,164	43,724	92,055	31,563
Stock products <sup>5</sup>	31,768,355	32,736,458	32,335,004	8,167,514	8,736,259	7,331,026	8,100,205	3,429,489
Futures	10,054,830	9,467,294	11,671,215	2,841,669	3,608,843	2,695,822	2,524,881	432,880
Stock dividend futures	291,688	367,785	346,555	62,500	81,250	49,689	153,116	0
Stock plus dividend futures	1,152	760	880	0	440	0	440	0
Call options	8,572,088	11,239,662	8,848,643	2,545,493	2,467,250	1,849,335	1,986,565	1,349,669
Put options	12,848,597	11,660,957	11,467,711	2,717,852	2,578,476	2,736,180	3,435,203	1,646,940

1 Available data: February 2017.

2 Contract size: 100 thousand euros.

3 The number of Ibex 35 mini futures (multiples of 1 euro) was standardised to the size of the Ibex 35 plus futures (multiples of 10 euro).

4 Contract size: Ibex 35, 10 euros.

5 Contract size: 100 stocks.

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

#### Issues registered at the CNMV

TABLE 1.15

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
<b>WARRANTS</b>								
Premium amount (million euro)	3,479.1	2,688.6	2,433.6	461.0	332.3	1,304.0	336.4	147.2
On stocks	1,807.3	1,438.2	939.5	280.7	193.2	328.3	137.2	56.5
On indexes	1,486.1	1,153.1	1,443.0	166.2	123.3	959.0	194.6	80.7
Other underlyings <sup>2</sup>	185.6	97.2	51.1	14.1	15.8	16.7	4.5	10.0
Number of issues	9,059	7,809	5,730	1,435	1,192	2,312	791	566
Number of issuers	8	5	6	6	4	5	4	3
<b>OPTION BUYING AND SELLING CONTRACTS</b>								
Nominal amounts (million euro)	5.0	650.0	1,964.5	305.0	608.5	450.0	601.0	201.0
On stocks	5.0	650.0	1,950.0	300.0	600.0	450.0	600.0	200.0
On indexes	0.0	0.0	14.5	5.0	8.5	0.0	1.0	1.0
Other underlyings <sup>2</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Number of issues	1	4	15	3	5	3	4	3
Number of issuers	1	1	2	2	2	1	2	2

1 Available data: February 2018.

2 Includes the following underlying: baskets of stocks, exchange rates, interest rates and commodities.



	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
<b>WARRANTS</b>								
Trading (million euro)	1,095.9	715.5	462.6	139.6	103.9	96.0	123.2	59.0
On Spanish stocks	303.6	248.4	156.8	57.0	41.2	28.5	30.1	11.7
On foreign stocks	66.7	32.6	29.9	8.6	6.6	5.0	9.7	3.0
On indexes	692.0	420.4	266.0	71.6	54.3	59.5	80.7	44.0
Other underlyings <sup>2</sup>	33.6	14.2	9.9	2.4	1.7	3.0	2.7	0.4
Number of issues <sup>3</sup>	7,530	6,296	5,084	1,580	1,169	951	974	1,152
Number of issuers <sup>3</sup>	9	8	7	6	7	7	7	7
<b>CERTIFICATES</b>								
Trading (million euro)	1.1	0.4	0.3	0.0	0.0	0.0	0.3	0.0
Number of issues <sup>3</sup>	2	2	2	1	2	0	1	1
Number of issuers <sup>3</sup>	1	1	1	1	1	0	1	1
<b>ETFs</b>								
Trading (million euro)	12,633.8	6,045.2	4,464.1	1,095.7	1,196.3	699.3	1,472.8	535.4
Number of funds	58	33	8	21	9	9	8	8
Assets <sup>4</sup> (million euro)	436.1	349.3	359.3	393.4	367.6	367.1	359.3	-

1 Available data: February 2018.

2 Includes the following underlying: baskets of stocks, exchange rates, interest rates and commodities.

3 Issues or issuers which were traded in each period.

4 Assets from national collective investment schemes is only included because assets from foreign ones are not available.

## 2 Investment services

### Investment services. Spanish firms, branches and agents

TABLE 2.1

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
<b>BROKER-DEALERS</b>								
Spanish firms	39	40	41	40	40	41	41	41
Branches	25	27	24	27	27	28	24	25
Agents	5,819	5,761	5,747	5,751	5,773	5,763	5,747	2,114
<b>BROKERS</b>								
Spanish firms	39	41	48	46	47	48	48	50
Branches	21	22	23	22	22	22	23	26
Agents	468	492	461	454	472	469	461	409
<b>PORTFOLIO MANAGEMENT COMPANIES</b>								
Spanish firms	3	2	1	2	1	1	1	1
Branches	9	8	0	0	0	0	0	0
Agents	0	0	0	0	0	0	0	0
<b>FINANCIAL ADVISORY FIRMS</b>								
Spanish firms	154	160	171	161	166	168	171	170
Branches	13	16	21	16	17	20	21	23
<b>CREDIT INSTITUTIONS<sup>2</sup></b>								
Spanish firms	134	126	122	125	125	124	122	121

1 Available data: February 2018.

2 Source: Banco de España.

### Servicios de inversión. Entidades extranjeras

TABLE 2.2

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
Total	3,176	3,310	3,356	3,345	3,368	3,366	3,356	3,371
Investment services firms	2,716	2,843	2,889	2,880	2,905	2,900	2,889	2,902
From EU member states	2,713	2,840	2,886	2,877	2,902	2,897	2,886	2,899
Branches	42	46	53	49	50	51	53	53
Free provision of services	2,671	2,794	2,833	2,828	2,852	2,846	2,833	2,846
From non-EU states	3	3	3	3	3	3	3	3
Branches	0	0	0	0	0	0	0	0
Free provision of services	3	3	3	3	3	3	3	3
Credit institutions <sup>2</sup>	460	467	467	465	463	466	467	469
From EU member states	451	460	461	459	457	460	461	463
Branches	53	55	52	55	56	55	52	53
Free provision of services	398	405	409	404	401	405	409	410
Subsidiaries of free provision of services institutions	0	0	0	0	0	0	0	0
From non-EU states	9	7	6	6	6	6	6	6
Branches	6	5	4	4	4	4	4	4
Free provision of services	3	2	2	2	2	2	2	2

1 Available data: February 2018.

2 Sources: Banco de España and CNMV.

## Intermediation of spot transactions<sup>1</sup>

TABLE 2.3

Million euro	2015	2016	2017	2016			2017		
				IV	I	II	III	IV	
<b>FIXED-INCOME</b>									
Total	5,365,817.5	4,625,411.6	3,727,687.0	993,743.7	1,135,283.7	921,329.6	830,152.5	840,921.2	
Broker-dealers	3,774,816.4	3,171,599.2	2,347,959.0	711,054.6	728,709.2	559,969.9	470,314.6	588,965.3	
Spanish organised markets	1,909,130.4	1,350,483.4	836,831.1	269,298.8	305,662.1	208,103.1	149,376.2	173,689.7	
Other Spanish markets	1,689,702.4	1,570,540.0	1,255,087.2	378,973.4	340,438.6	292,400.3	273,027.3	349,221.0	
Foreign markets	175,983.6	250,575.8	256,040.7	62,782.4	82,608.5	59,466.5	47,911.1	66,054.6	
Brokers	1,591,001.1	1,453,812.4	1,379,728.0	282,689.1	406,574.5	361,359.7	359,837.9	251,955.9	
Spanish organised markets	14,160.0	25,247.8	6,067.6	1,026.1	1,611.4	2,114.7	1,317.3	1,024.2	
Other Spanish markets	1,402,106.3	1,222,925.7	1,175,387.4	239,503.4	343,082.9	306,549.5	317,566.3	208,188.7	
Foreign markets	174,734.8	205,638.9	198,273.0	42,159.6	61,880.2	52,695.5	40,954.3	42,743.0	
<b>EQUITY</b>									
Total	1,020,289.5	798,564.7	804,328.3	215,189.9	179,859.0	220,664.0	187,021.8	216,783.5	
Broker-dealers	914,649.2	636,727.0	660,312.7	150,644.4	166,798.5	191,970.1	143,388.5	158,155.6	
Spanish organised markets	855,883.2	583,283.9	610,682.8	137,582.1	153,257.5	178,408.9	133,659.1	145,357.3	
Other Spanish markets	3,327.8	2,313.1	3,178.2	716.8	755.3	1,317.1	458.3	647.5	
Foreign markets	55,438.2	51,130.0	46,451.8	12,345.5	12,785.7	12,244.1	9,271.1	12,150.9	
Brokers	105,640.3	161,837.7	144,015.5	64,545.5	13,060.5	28,693.9	43,633.3	58,627.8	
Spanish organised markets	14,207.3	11,090.1	7,037.7	2,083.0	1,615.2	1,782.9	1,325.8	2,313.8	
Other Spanish markets	13,769.0	8,902.9	12,052.0	3,992.4	1,085.8	2,710.8	3,424.4	4,831.0	
Foreign markets	77,664.0	141,844.7	124,925.8	58,470.1	10,359.5	24,200.2	38,883.1	51,483.0	

<sup>1</sup> Period accumulated data. Quarterly.

## Intermediation of derivative transactions<sup>1,2</sup>

TABLE 2.4

Million euro	2015	2016	2017	2016			2017		
				IV	I	II	III	IV	
Total	12,104,474.3	10,985,305.6	10,708,583.9	2,700,454.0	2,662,706.3	2,598,171.3	2,301,768.2	3,145,938.1	
Broker-dealers	11,958,716.2	10,698,379.2	10,528,524.3	2,644,744.7	2,617,322.1	2,553,651.3	2,264,865.2	3,092,685.7	
Spanish organised markets	6,215,223.3	4,842,990.7	5,330,761.9	1,097,787.4	1,114,489.2	1,262,127.4	1,198,702.1	1,755,443.2	
Foreign organised markets	5,386,722.4	5,204,785.7	4,676,156.7	1,392,656.8	1,358,134.8	1,192,378.6	963,880.9	1,161,762.4	
Non-organised markets	356,770.5	650,602.8	521,605.7	154,300.5	144,698.1	99,145.3	102,282.2	175,480.1	
Brokers	145,758.1	286,926.4	180,059.6	55,709.3	45,384.2	44,520.0	36,903.0	53,252.4	
Spanish organised markets	7,510.9	20,935.4	17,171.0	4,301.9	3,859.8	3,595.4	2,203.1	7,512.7	
Foreign organised markets	27,846.8	59,427.1	48,043.8	15,990.8	9,697.5	8,813.9	10,086.7	19,445.7	
Non-organised markets	110,400.4	206,563.9	114,844.8	35,416.6	31,826.9	32,110.7	24,613.2	26,294.0	

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

<sup>2</sup> Period accumulated data. Quarterly.

**Portfolio management. Number of portfolios and assets under management<sup>1</sup>**

TABLE 2.5

	2015	2016	2017	2016			2017	
				IV	I	II	III	IV
<b>NUMBER OF PORTFOLIOS</b>								
Total <sup>2</sup>	13,713	15,818	12,601	15,818	12,774	13,340	13,300	12,601
Broker-dealers. Total	5,711	5,743	3,769	5,743	5,518	5,356	5,261	3,769
IIC <sup>3</sup>	60	34	23	34	25	26	23	23
Other <sup>4</sup>	5,651	5,709	3,746	5,709	5,493	5,330	5,238	3,746
Brokers. Total	5,681	6,512	8,831	6,512	7,256	7,984	8,039	8,831
IIC <sup>3</sup>	95	90	89	90	86	85	90	89
Other <sup>4</sup>	5,586	6,422	8,742	6,422	7,170	7,899	7,949	8,742
Portfolio management companies <sup>2</sup> . Total	2,321	3,563	1	3,563	-	-	-	1
IIC <sup>3</sup>	1	1	1	1	-	-	-	1
Other <sup>4</sup>	2,320	3,562	0	3,562	-	-	-	0
<b>ASSETS UNDER MANAGEMENT (thousand euro)</b>								
Total <sup>2</sup>	9,201,678	13,298,318	36,923,861	13,298,318	37,109,106	38,275,173	37,889,931	36,923,861
Broker-dealers. Total	5,406,804	5,534,052	33,958,038	5,534,052	34,351,526	35,491,677	35,042,579	33,958,038
IIC <sup>3</sup>	1,546,293	890,371	378,761	890,371	869,025	886,772	379,843	378,761
Other <sup>4</sup>	3,860,511	4,643,682	33,579,278	4,643,682	33,482,501	34,604,905	34,662,736	33,579,278
Brokers. Total	2,565,132	2,557,207	2,949,741	2,557,207	2,757,580	2,783,496	2,847,352	2,949,741
IIC <sup>3</sup>	1,448,260	1,352,653	1,629,443	1,352,653	1,435,779	1,473,639	1,522,674	1,629,443
Other <sup>4</sup>	1,116,872	1,204,553	1,320,298	1,204,553	1,321,800	1,309,857	1,324,679	1,320,298
Portfolio management companies <sup>2</sup> . Total	1,229,742	5,207,059	16,082	5,207,059	-	-	-	16,082
IIC <sup>3</sup>	15,729	15,916	16,082	15,916	-	-	-	16,082
Other <sup>4</sup>	1,214,013	5,191,143	0	5,191,143	-	-	-	0

1 Data at the end of period. Quarterly. Revised data from third quarter 2016.

2 Only public information about portfolio management companies is shown since the first quarter of 2016 with the objective of maintaining statistical secrecy, as the number of companies is not enough to ensure it. For the rest of the periods only broker-dealers and brokers data are shown.

3 IIC: Institución de Inversión Colectiva / CIS: Collective Investment Scheme. Includes both resident and non-resident IICs management.

4 Includes the rest of clients, both covered and not covered by the Investment Guarantee Fund, an investor compensation scheme regulated by Royal Decree 948/2001.

**Financial advice. Number of contracts<sup>1, 2</sup>**

TABLE 2.6

	2015	2016	2017	2016			2017	
				IV	I	II	III	IV
<b>NUMBER OF CONTRACTS<sup>3</sup></b>								
Total <sup>4</sup>	17,627	21,343	21,790	21,343	20,444	21,789	21,900	21,790
Broker-dealers. Total <sup>5</sup>	4,241	4,680	5,125	4,680	4,804	4,893	4,987	5,125
Retail clients	4,217	4,669	5,108	4,669	4,796	4,880	4,973	5,108
Professional clients	11	3	6	3	1	6	6	6
Brokers. Total <sup>5</sup>	11,456	14,358	16,665	14,358	15,640	16,896	16,913	16,665
Retail clients	11,247	14,170	16,496	14,170	15,461	16,714	16,735	16,496
Professional clients	176	154	137	154	144	145	141	137
Portfolio management companies <sup>4</sup> . Total <sup>5</sup>	1,930	2,305	0	2,305	-	-	-	0
Retail clients	1,928	2,303	0	2,303	-	-	-	0
Professional clients	2	2	0	2	-	-	-	0
<b>Pro memoria: commission received for financial advice<sup>6</sup> (thousand euro)</b>								
Total <sup>4</sup>	10,937	11,515	9,732	11,515	2,935	6,153	9,732	9,732
Broker-dealers	2,930	2,547	2,586	2,547	645	1,670	2,586	2,586
Brokers	7,636	8,614	7,146	8,614	2,290	4,483	7,146	7,146
Portfolio management companies <sup>4</sup>	371	354	0	354	-	-	-	0

1 Data at the end of period. Quarterly.

2 Quarterly data on assets advised are not available since the enter into force of Circular 3/2014, of 22nd October, of the Comisión Nacional del Mercado de Valores.

3 Revised data from 2015.

4 Only public information about portfolio management companies is shown since the first quarter of 2016 with the objective of maintaining statistical secrecy, as the number of companies is not enough to ensure it. For the rest of the periods only broker-dealers and brokers data are shown.

5 Includes retail, professional and other clients.

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

**Aggregated income statement. Broker-dealers**

TABLE 2.7

Thousand euro <sup>1</sup>	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>2</sup>
I. Interest income	55,570	53,930	58,545	37,612	49,527	51,951	58,545	1,140
II. Net commission	422,542	373,552	400,884	98,284	199,702	308,230	400,884	25,082
Commission revenues	614,705	538,586	547,776	136,196	276,224	419,488	547,776	36,113
Brokering	322,857	245,700	217,667	60,936	120,062	167,589	217,667	16,808
Placement and underwriting	11,556	5,955	17,553	2,787	10,789	14,317	17,553	194
Securities deposit and recording	24,358	47,843	38,175	9,847	19,632	28,094	38,175	3,052
Portfolio management	22,541	23,738	50,467	12,726	25,648	40,595	50,467	1,235
Design and advising	13,575	14,648	16,402	2,727	6,447	9,915	16,402	1,082
Stocks search and placement	1,497	2,155	1,500	322	947	1,255	1,500	0
Market credit transactions	0	0	0	0	0	0	0	0
IICs <sup>3</sup> marketing	73,889	75,505	81,225	19,625	40,148	60,857	81,225	5,672
Other	144,432	123,042	121,270	27,226	52,551	96,866	121,270	7,817
Commission expenses	192,163	165,034	146,892	37,912	76,522	111,258	146,892	11,031
III. Financial investment income	215,861	104,292	40,996	11,961	20,155	29,923	40,996	3,577
IV. Net exchange differences and other operating products and expenses	-128,200	-1,177	28,450	10,654	15,769	21,179	28,450	1,432
V. Gross income	565,773	530,597	528,875	158,511	285,153	411,283	528,875	31,231
VI. Operating income	186,771	169,499	180,204	67,505	98,631	147,541	180,204	4,586
VII. Earnings from continuous activities	141,291	140,521	156,379	62,058	89,921	129,661	156,379	3,424
VIII Net earnings of the period	141,291	140,521	155,972	62,058	89,921	129,661	155,972	3,424

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

2 Available data: January 2018.

3 IIC: Institución de Inversión Colectiva / CIS: Collective Investment Scheme.

**Results of proprietary trading. Broker-dealers**

TABLE 2.8

Thousand euro <sup>1</sup>	2015	2016	2017	2016		2017		
				IV	I	II	III	IV
<b>TOTAL</b>								
Total	137,327	152,893	128,817	152,893	60,430	81,930	99,011	128,817
Money market assets and public debt	9,327	8,332	3,909	8,332	1,072	1,973	2,837	3,909
Other fixed-income securities	24,795	35,415	31,391	35,415	9,484	17,792	25,586	31,391
Domestic portfolio	8,990	19,863	17,963	19,863	6,004	11,298	15,172	17,963
Foreign portfolio	15,805	15,552	13,428	15,552	3,480	6,494	10,414	13,428
Equities	112,943	135,587	53,704	135,587	21,940	27,445	38,048	53,704
Domestic portfolio	18,141	14,010	11,530	14,010	5,131	7,094	9,203	11,530
Foreign portfolio	94,802	121,577	42,174	121,577	16,809	20,351	28,845	42,174
Derivatives	109,668	-52,325	-40,286	-52,325	-19,817	-23,118	-30,322	-40,286
Repurchase agreements	-248	-471	-307	-471	-140	-256	-292	-307
Market credit transactions	0	0	0	0	0	7	0	0
Deposits and other transactions with financial Intermediaries	1,605	-1,030	84	-1,030	171	417	399	84
Net exchange differences	-142,545	-29,730	4,290	-29,730	3,562	4,109	3,982	4,290
Other operating products and expenses	14,344	28,555	24,160	28,555	7,091	11,660	17,197	24,160
Other transactions	7,438	28,560	51,872	28,560	37,067	41,901	41,576	51,872
<b>INTEREST INCOME</b>								
Total	55,570	53,930	58,544	53,930	37,613	49,529	51,952	58,544
Money market assets and public debt	2,156	1,708	1,576	1,708	289	756	1,168	1,576
Other fixed-income securities	2,731	1,742	1,285	1,742	337	664	965	1,285
Domestic portfolio	1,534	809	415	809	137	265	352	415
Foreign portfolio	1,197	933	870	933	200	399	613	870
Equities	43,826	24,619	6,201	24,619	454	3,299	5,032	6,201
Domestic portfolio	3,622	3,298	3,041	3,298	39	1,409	2,047	3,041
Foreign portfolio	40,204	21,321	3,160	21,321	415	1,890	2,985	3,160
Repurchase agreements	-248	-471	-307	-471	-140	-256	-292	-307
Market credit transactions	0	0	0	0	0	7	0	0
Deposits and other transactions with financial Intermediaries	1,605	-1,030	84	-1,030	171	417	399	84
Other transactions	5,500	27,362	49,705	27,362	36,502	44,642	44,680	49,705
<b>FINANCIAL INVEST INCOME</b>								
Total	215,861	104,291	40,995	104,291	11,961	20,152	29,922	40,995
Money market assets and public debt	7,171	6,624	2,333	6,624	783	1,217	1,669	2,333
Other fixed-income securities	22,064	33,673	30,106	33,673	9,147	17,128	24,621	30,106
Domestic portfolio	7,456	19,054	17,548	19,054	5,867	11,033	14,820	17,548
Foreign portfolio	14,608	14,619	12,558	14,619	3,280	6,095	9,801	12,558
Equities	69,117	110,968	47,503	110,968	21,486	24,146	33,016	47,503
Domestic portfolio	14,519	10,712	8,489	10,712	5,092	5,685	7,156	8,489
Foreign portfolio	54,598	100,256	39,014	100,256	16,394	18,461	25,860	39,014
Derivatives	109,668	-52,325	-40,286	-52,325	-19,817	-23,118	-30,322	-40,286
Other transactions	7,841	5,351	1,339	5,351	362	779	938	1,339
<b>EXCHANGE DIFFERENCES AND OTHER ITEMS</b>								
Total	-134,104	-5,328	29,278	-5,328	10,856	12,249	17,137	29,278
Net exchange differences	-142,545	-29,730	4,290	-29,730	3,562	4,109	3,982	4,290
Other operating products and expenses	14,344	28,555	24,160	28,555	7,091	11,660	17,197	24,160
Other transactions	-5,903	-4,153	828	-4,153	203	-3,520	-4,042	828

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

## Aggregated income statement. Brokers

TABLE 2.9

Thousand euro <sup>1</sup>	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>2</sup>
I. Interest income	884	903	3,127	157	818	994	3,127	31
II. Net commission	113,904	108,111	120,194	27,149	55,773	82,015	120,194	9,625
Commission revenues	135,320	129,682	142,323	32,971	66,788	98,340	142,323	11,445
Brokering	31,845	24,181	20,459	5,666	10,759	15,003	20,459	1,909
Placement and underwriting	3,829	3,193	3,427	1,510	1,804	1,903	3,427	39
Securities deposit and recording	521	603	924	111	355	633	924	71
Portfolio management	10,711	11,054	12,492	2,991	5,797	8,890	12,492	1,198
Design and advising	7,856	8,980	11,935	2,347	4,664	7,401	11,935	718
Stocks search and placement	216	40	0	0	0	0	0	0
Market credit transactions	0	0	0	0	0	0	0	0
IICs <sup>3</sup> marketing	53,169	50,504	59,398	12,424	26,491	40,658	59,398	5,756
Other	27,173	31,128	33,689	7,921	16,918	23,852	33,689	1,754
Commission expenses	21,416	21,571	22,129	5,822	11,015	16,325	22,129	1,820
III. Financial investment income	592	245	1,139	258	157	228	1,139	74
IV. Net exchange differences and other operating products and expenses	1,197	-1,030	-1,706	-267	-1,107	-1,570	-1,706	-132
V. Gross income	116,577	108,229	122,754	27,297	55,641	81,667	122,754	9,598
VI. Operating income	22,148	10,140	16,866	4,475	6,652	8,951	16,866	1,641
VII. Earnings from continuous activities	17,266	6,982	11,878	3,820	5,640	7,448	11,878	1,595
VIII. Net earnings of the period	17,266	6,982	11,878	3,820	5,640	7,448	11,878	1,595

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

2 Available data: January 2018.

3 IIC: Institución de Inversión Colectiva / CIS: Collective Investment Scheme.

## Aggregated income statement. Portfolio management companies<sup>1</sup>

TABLE 2.10

Thousand euro <sup>2</sup>	2013	2014	2015	2016	2017
I. Interest income	667	574	399	83	23
II. Net commission	9,362	11,104	8,526	6,617	1,543
Commission revenues	18,603	15,411	13,064	6,617	1,543
Portfolio management	17,028	13,572	11,150	4,228	1,095
Design and advising	1,575	849	371	354	59
Other	0	990	1,544	2,035	390
Commission expenses	9,241	4,307	4,538	0	0
III. Financial investment income	9	-6	-28	-1	6
IV. Net exchange differences and other operating products and expenses	-32	-237	-234	-126	0
V. Gross income	10,006	11,435	8,663	6,573	1,520
VI. Operating income	3,554	5,860	3,331	3,172	624
VII. Earnings from continuous activities	2,472	4,135	2,335	2,222	440
VIII. Net earnings of the period	2,472	4,135	2,335	2,222	440

1 Only public information about portfolio management companies is shown since the first quarter of 2016 with the objective of maintaining statistical secrecy, as the number of companies is not enough to ensure it.

2 Accumulated data from the beginning of the year. It includes companies removed throughout the year.

## Capital adequacy and capital ratio<sup>1,2</sup>

TABLE 2.11

	2015	2016	2017	2016		2017		
				IV	I	II	III	IV
<b>TOTAL<sup>3</sup></b>								
Total capital ratio <sup>4</sup>	43.14	44.13	33.40	44.13	32.60	37.42	35.41	33.40
Own funds surplus (thousand euro)	1,090,823	965,833	803,793	965,833	954,784	1,023,378	970,656	803,793
Surplus (%) <sup>5</sup>	439.29	451.60	317.54	451.60	307.54	367.77	342.64	317.54
Number of companies according to its surplus percentage								
≤100%	16	15	18	15	16	15	19	18
>100 - ≤300%	22	25	23	25	28	26	22	23
>300 - ≤500%	12	13	14	13	10	15	15	14
>500%	20	18	18	18	17	16	17	18
<b>BROKER-DEALERS</b>								
Total capital ratio <sup>4</sup>	44.81	45.97	34.28	45.97	33.12	38.49	36.34	34.28
Own funds surplus (thousand euro)	1,037,623	912,248	755,143	912,248	905,344	973,923	921,152	755,143
Surplus (%) <sup>5</sup>	44.81	474.60	328.55	474.60	314.06	381.14	354.31	328.55
Number of companies according to its surplus percentage								
≤100%	6	8	8	8	8	6	7	8
>100 - ≤300%	11	11	10	11	14	12	12	10
>300 - ≤500%	7	9	8	9	6	9	8	8
>500%	14	12	13	12	12	13	13	13
<b>BROKERS</b>								
Total capital ratio <sup>4</sup>	25.14	26.35	24.69	26.35	25.82	25.40	25.00	24.69
Own funds surplus (thousand euro)	47,196	47,620	48,452	47,620	49,440	49,455	49,504	48,452
Surplus (%) <sup>5</sup>	25.14	229.33	208.65	229.33	222.80	217.53	212.44	208.65
Number of companies according to its surplus percentage								
≤100%	10	7	10	7	8	9	12	10
>100 - ≤300%	10	13	12	13	14	14	10	12
>300 - ≤500%	5	4	6	4	4	6	7	6
>500%	5	5	5	5	5	3	4	5
<b>PORTFOLIO MANAGEMENT COMPANIES<sup>3</sup></b>								
Total capital ratio <sup>4</sup>	71.26	61.64	30.70	61.64	-	-	-	30.70
Own funds surplus (thousand euro)	6,004	5,965	198	5,965	-	-	-	198
Surplus (%) <sup>5</sup>	791.04	670.22	283.73	670.22	-	-	-	283.73
Number of companies according to its surplus percentage								
≤100%	0	0	0	0	-	-	-	0
>100 - ≤300%	1	1	1	1	-	-	-	1
>300 - ≤500%	0	0	0	0	-	-	-	0
>500%	1	1	0	1	-	-	-	0

1 On January 1<sup>st</sup> 2014 entered into force the Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms, which has changed the own funds requirements calculation. Since January 2014 only the entities subject to reporting requirements are included, according to Circular 2/2014, of 23<sup>rd</sup> June, of the Comisión Nacional del Mercado de Valores, on the exercise of various regulatory options regarding solvency requirements for investment firms and their consolidated groups.

2 Revised data from 2015.

3 Only public information about portfolio management companies is shown since the first quarter of 2016 with the objective of maintaining statistical secrecy, as the number of companies is not enough to ensure it. For the rest of the periods only broker-dealers and brokers data are shown.

4 Total capital ratio is the own funds of the institution expressed as a percentage of the total risk exposure amount. This ratio should not be under 8%.

5 Average surplus percentage is weighted by the required equity of each company. It is an indicator of the number of times, in percentage terms, that the surplus contains the required equity in an average company.



## Return on equity (ROE) before taxes<sup>1</sup>

TABLE 2.12

	2015	2016	2017	2016		2017		
				IV	I	II	III	IV
<b>TOTAL<sup>2</sup></b>								
Average (%) <sup>3</sup>	15.34	15.97	18.35	15.97	21.78	16.40	16.18	18.35
Number of companies according to its annualized return								
Losses	21	20	22	20	23	25	22	22
0 - ≤15%	23	31	28	31	20	22	32	28
>15 - ≤45%	22	17	22	17	25	25	19	22
>45 - ≤75%	5	6	4	6	6	7	9	4
>75%	9	9	13	9	12	8	7	13
<b>BROKER-DEALERS</b>								
Average (%) <sup>3</sup>	14.85	16.16	18.48	16.16	22.10	16.62	16.50	18.48
Number of companies according to its annualized return								
Losses	9	8	8	8	11	10	9	8
0 - ≤15%	14	20	17	20	8	12	17	17
>15 - ≤45%	10	6	11	6	13	11	10	11
>45 - ≤75%	4	2	1	2	4	5	3	1
>75%	2	4	3	4	4	2	2	3
<b>BROKERS</b>								
Average (%) <sup>3</sup>	21.52	11.53	16.92	11.53	17.84	13.57	12.13	16.92
Number of companies according to its annualized return								
Losses	12	12	14	12	12	15	13	14
0 - ≤15%	8	10	11	10	12	10	15	11
>15 - ≤45%	11	11	10	11	12	14	9	10
>45 - ≤75%	1	3	3	3	2	2	6	3
>75%	7	5	10	5	8	6	5	10
<b>PORTFOLIO MANAGEMENT COMPANIES<sup>2</sup></b>								
Average (%) <sup>3</sup>	24.49	46.29	20.65	46.29	-	-	-	20.65
Number of companies according to its annualized return								
Losses	0	0	0	0	-	-	-	0
0 - ≤15%	1	1	0	1	-	-	-	0
>15 - ≤45%	1	0	1	0	-	-	-	1
>45 - ≤75%	0	1	0	1	-	-	-	0
>75%	0	0	0	0	-	-	-	0

1 ROE has been calculated as:

$$ROE = \frac{\text{Earnings before taxes (annualized)}}{\text{Own Funds}}$$

*Own Funds* = Share capital + Paid-in surplus + Reserves - Own shares + Prior year profits and retained earnings - Interim dividend.

2 Only public information about portfolio management companies is shown since the first quarter of 2016 with the objective of maintaining statistical secrecy, as the number of companies is not enough to ensure it. For the rest of the periods only broker-dealers and brokers data are shown.

3 Average weighted by equity, %.

## Financial advisory firms. Main figures<sup>1</sup>

TABLE 2.13

Thousand euro	2013	2014	2015	2016	2017 <sup>2</sup>
<b>ASSETS ADVISED<sup>3</sup></b>					
Total	17,630,081	21,284,942	25,384,582	30,174,877	30,741,630
Retail clients	4,991,653	5,671,431	6,798,749	7,588,143	9,047,166
Professional	3,947,782	4,808,250	5,108,032	5,654,358	6,482,283
Other	8,690,646	10,805,261	13,477,801	16,932,376	15,212,181
<b>COMMISSION INCOME<sup>4</sup></b>					
Total					
Commission revenues	33,272	48,460	57,231	52,534	64,289
Other income	33,066	47,641	56,227	51,687	63,683
<b>EQUITY</b>	206	819	1,004	847	606
Total					
Share capital	21,498	24,808	25,021	24,119	33,595
Reserves and retained earnings	5,156	5,372	5,881	6,834	7,796
Income for the year <sup>4</sup>	9,453	7,978	7,583	12,123	13,595

1 Annual frequency since 2015 (Circular 3/2014, of 22<sup>nd</sup> October, of the Comisión Nacional del Mercado de Valores).

2 Provisional data, with 97% of registered entities

3 Data at the end of each period.

4 Accumulated data from the beginning of the year.

### 3 Collective investment schemes (IICs)<sup>a, b</sup>

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

TABLE 3.1

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
Total financial IICs	5,180	5,035	4,564	4,844	4,765	4,674	4,564	4,532
Mutual funds	1,760	1,748	1,676	1,741	1,721	1,712	1,676	1,660
Investment companies	3,372	3,239	2,833	3,054	2,990	2,907	2,833	2,817
Funds of hedge funds	11	7	8	8	9	9	8	8
Hedge funds	37	41	47	41	45	46	47	47
Total real estate IICs	9	9	7	10	10	10	7	7
Real estate mutual funds	3	3	3	3	3	3	3	3
Real estate investment companies	6	6	4	7	7	7	4	4
Total foreign IICs marketed in Spain	880	941	1013	959	957	998	1,013	1,018
Foreign funds marketed in Spain	425	441	455	440	430	452	455	460
Foreign companies marketed in Spain	455	500	558	519	527	546	558	558
Management companies	96	101	109	105	106	107	109	111
IIC depositories	65	56	54	56	55	55	54	54

1 Available data: February 2018.

#### Number of IICs investors and shareholders<sup>1</sup>

TABLE 3.2

	2015	2016	2017	2017			2018	
				I	II	III	IV	I <sup>2</sup>
Total financial IICs	8,164,054	8,704,329	10,704,585	9,774,214	9,999,138	10,489,150	10,704,585	10,958,376
Mutual funds	7,680,124	8,248,249	10,283,312	9,326,259	9,562,652	10,060,765	10,283,312	10,537,255
Investment companies	483,930	456,080	421,273	447,955	436,486	428,385	421,273	421,121
Total real estate IICs	4,501	4,601	1,424	4,463	4,450	4,450	1,424	1,425
Real estate mutual funds	3,918	3,927	1,097	3,946	3,960	3,963	1,097	1,098
Real estate investment companies	583	674	327	517	490	487	327	327
Total foreign IICs marketed in Spain <sup>3</sup>	1,643,776	1,748,604	2,226,991	1,984,474	2,134,143	2,196,847	2,226,991	–
Foreign funds marketed in Spain	298,733	372,872	445,299	431,295	448,554	460,374	445,299	–
Foreign companies marketed in Spain	1,345,043	1,375,732	1,781,692	1,553,179	1,685,589	1,736,473	1,781,692	–

1 Investors and shareholders who invest in many sub-funds from the same IIC have been taking into account once. For this reason, investors and shareholders can be different from those in tables 3.6 and 3.7.

2 Available data: January 2018.

3 Exchange traded funds (ETFs) data is not included.

#### IICs total net assets

TABLE 3.3

Million euro	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
Total financial IICs	255,677.0	269,953.8	296,619.5	279,923.4	285,434.0	290,181.9	296,619.5	302,812.5
Mutual funds <sup>2</sup>	222,144.6	237,862.2	265,194.8	247,279.3	253,581.1	258,466.2	265,194.8	270,961.9
Investment companies	33,532.4	32,091.6	31,424.7	32,644.1	31,852.9	31,715.7	31,424.7	31,850.6
Total real estate IICs	1,093.1	1,077.4	991.4	1,084.0	1,082.8	1,088.9	991.4	991.2
Real estate mutual funds	391.0	370.1	360.0	369.7	360.5	360.3	360.0	360.1
Real estate investment companies	702.1	707.3	631.4	714.3	722.3	728.6	631.4	631.1
Total foreign IICs marketed in Spain <sup>3</sup>	108,091.6	114,990.2	150,420.6	127,534.6	137,341.6	141,828.0	150,420.6	–
Foreign funds marketed in Spain	15,305.1	21,337.5	26,133.9	25,306.4	26,864.2	27,108.5	26,133.9	–
Foreign companies marketed in Spain	92,786.5	93,652.8	124,286.7	102,228.1	110,477.4	114,719.5	124,286.7	–

1 Available data: January 2018.

2 Mutual funds investment in financial mutual funds of the same management company reached 6,758.6 million euro in September 2017.

3 Exchange traded funds (ETFs) data is not included.

a IIC: Institución de Inversión Colectiva / CIS: Collective Investment Scheme.

b All information about mutual funds and Investment companies comprised in this section do not include hedge funds and funds of hedge funds. The information about hedge funds and funds of hedge funds is included in table 3.12.

## Mutual funds asset allocation

TABLE 3.4

Million euro	2015	2016	2017	2016		2017		
				IV	I	II	III	IV
Asset	222,144.6	237,862.2	265,194.8	237,862.2	247,279.3	253,581.1	258,466.2	265,194.8
Portfolio investment	204,797.4	219,141.1	244,598.0	219,141.1	227,574.3	234,855.5	239,130.5	244,598.0
Domestic securities	93,833.6	95,799.1	83,032.1	95,799.1	93,627.1	88,257.1	83,884.6	83,032.1
Debt securities	58,451.3	63,471.1	55,389.1	63,471.1	63,454.6	60,082.3	55,836.9	55,389.1
Shares	8,757.5	8,529.9	10,911.7	8,529.9	9,687.4	10,248.0	10,429.3	10,911.7
Investment collective schemes	5,698.5	6,249.5	7,625.9	6,249.5	6,567.0	6,811.8	7,534.8	7,625.9
Deposits in Credit institutions	20,482.9	17,134.3	8,657.1	17,134.3	13,356.1	10,562.0	9,546.8	8,657.1
Derivatives	433.7	405.7	441.4	405.7	554.4	545.4	529.2	441.4
Other	9.7	8.5	6.8	8.5	7.7	7.7	7.4	6.8
Foreign securities	110,957.0	123,336.0	161,556.6	123,336.0	133,927.6	146,588.9	155,236.4	161,556.6
Debt securities	48,542.8	56,307.9	67,794.0	56,307.9	59,346.7	64,848.2	67,487.2	67,794.0
Shares	18,654.1	20,035.3	27,081.8	20,035.3	23,257.2	24,241.5	25,958.6	27,081.8
Investment collective schemes	43,365.7	46,435.1	66,099.9	46,435.1	50,626.4	56,832.3	61,155.5	66,099.9
Deposits in Credit institutions	104.1	81.2	74.7	81.2	127.5	101.8	90.8	74.7
Derivatives	285.6	474.3	504.7	474.3	567.7	563.3	542.6	504.7
Other	4.8	2.3	1.4	2.3	2.1	1.8	1.7	1.4
Doubtful assets and matured investment	6.8	6.1	9.3	6.1	19.5	9.5	9.5	9.3
Intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net fixed assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash	16,594.5	18,392.6	19,988.5	18,392.6	19,493.7	19,077.4	18,910.6	19,988.5
Net balance (Debtors - Creditors)	752.7	328.5	608.3	328.5	211.3	-351.8	425.1	608.3

## Investment companies asset allocation

TABLE 3.5

Million euro	2015	2016	2017	2016		2017		
				IV	I	II	III	IV
Asset	33,532.4	32,091.6	31,424.7	32,091.6	32,644.1	31,852.9	31,715.7	31,424.7
Portfolio investment	30,035.2	28,127.7	28,804.9	28,127.7	29,463.9	28,708.5	28,745.3	28,804.9
Domestic securities	9,424.4	7,707.1	6,229.4	7,707.1	7,898.8	7,305.1	6,684.0	6,229.4
Debt securities	3,663.3	2,395.4	1,653.8	2,395.4	2,266.2	2,231.0	1,842.5	1,653.8
Shares	3,090.3	2,871.9	2,674.5	2,871.9	3,151.4	2,923.2	2,816.7	2,674.5
Investment collective schemes	1,418.4	1,485.3	1,625.9	1,485.3	1,660.4	1,636.6	1,598.9	1,625.9
Deposits in Credit institutions	1,226.3	925.3	236.2	925.3	789.6	477.5	390.8	236.2
Derivatives	-7.4	-5.2	-0.6	-5.2	-4.7	-3.2	-4.1	-0.6
Other	33.7	34.4	39.7	34.4	36.0	39.9	39.2	39.7
Foreign securities	20,608.1	20,412.7	22,566.2	20,412.7	21,556.7	21,396.7	22,054.3	22,566.2
Debt securities	4,472.0	4,263.3	4,396.6	4,263.3	4,347.3	4,395.1	4,471.0	4,396.6
Shares	7,025.9	6,465.5	6,987.8	6,465.5	6,766.6	6,512.0	6,821.5	6,987.8
Investment collective schemes	9,090.2	9,653.0	11,153.5	9,653.0	10,423.0	10,456.9	10,744.4	11,153.5
Deposits in Credit institutions	6.2	6.7	0.0	6.7	6.8	4.5	4.4	0.0
Derivatives	8.3	15.7	19.3	15.7	5.5	20.3	3.7	19.3
Other	5.5	8.4	8.9	8.4	7.6	7.9	9.4	8.9
Doubtful assets and matured investment	2.7	7.9	9.3	7.9	8.4	6.7	6.9	9.3
Intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net fixed assets	0.1	0.1	0.6	0.1	0.1	0.6	0.6	0.6
Cash	3,211.3	3,791.7	2,421.7	3,791.7	2,961.6	2,942.8	2,719.2	2,421.7
Net balance (Debtors - Creditors)	285.8	172.2	197.5	172.2	218.5	201.0	250.6	197.5

**Financial mutual funds: number, investors and total net assets by category<sup>1, 2</sup>**

TABLE 3.6

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>3</sup>
<b>NO. OF FUNDS</b>								
Total financial mutual funds	1,804	1,805	1,741	1,815	1,804	1,795	1,741	1,746
Fixed-income <sup>4</sup>	319	306	290	296	299	294	290	291
Mixed fixed-income <sup>5</sup>	132	148	155	154	154	158	155	156
Mixed equity <sup>6</sup>	142	168	176	172	173	177	176	177
Euro equity	109	112	111	114	112	113	111	110
Foreign equity	200	201	211	209	212	210	211	218
Guaranteed fixed-income	186	122	79	111	100	90	79	76
Guaranteed equity <sup>7</sup>	205	198	188	201	197	190	188	186
Global funds	178	203	225	208	217	223	225	227
Passive management	213	220	202	218	212	213	202	201
Absolute return	97	106	104	111	107	106	104	104
<b>INVESTORS</b>								
Total financial mutual funds	7,682,947	8,253,611	10,287,454	9,332,934	9,569,922	10,068,296	10,287,454	10,541,461
Fixed-income <sup>4</sup>	2,203,847	2,347,984	2,627,547	2,554,194	2,656,675	2,660,197	2,627,547	2,649,240
Mixed fixed-income <sup>5</sup>	1,130,190	1,043,798	1,197,523	1,169,480	1,114,668	1,154,688	1,197,523	1,212,907
Mixed equity <sup>6</sup>	612,276	448,491	584,408	485,795	533,200	552,773	584,408	598,354
Euro equity	422,469	395,697	710,928	429,147	515,999	663,541	710,928	748,155
Foreign equity	1,041,517	1,172,287	1,865,367	1,505,724	1,547,970	1,790,875	1,865,367	1,947,285
Guaranteed fixed-income	423,409	307,771	190,075	273,188	239,787	205,956	190,075	187,126
Guaranteed equity <sup>7</sup>	417,843	552,445	527,533	576,664	560,146	542,772	527,533	523,839
Global funds	381,590	658,722	1,086,937	857,135	903,273	985,627	1,086,937	1,145,658
Passive management	554,698	746,233	638,966	723,472	697,071	673,604	638,966	629,202
Absolute return	479,182	565,325	858,170	743,411	786,472	823,971	858,170	899,695
<b>TOTAL NET ASSETS (million euro)</b>								
Total financial mutual funds	222,144.6	237,862.2	265,194.8	247,279.3	253,581.1	258,466.2	265,195	270,962.4
Fixed-income <sup>4</sup>	65,583.8	74,226.4	70,563.9	72,038.9	71,124.9	70,297.1	70,563.9	70,155.6
Mixed fixed-income <sup>5</sup>	44,791.8	40,065.6	43,407.0	41,468.7	41,777.8	42,668.4	43,407.0	43,921.0
Mixed equity <sup>6</sup>	21,502.9	16,310.6	22,386.7	18,159.5	19,831.4	20,754.6	22,386.7	23,354.0
Euro equity	9,092.9	8,665.9	12,203.2	9,874.5	10,996.5	11,753.3	12,203.2	13,083.1
Foreign equity	17,143.2	17,678.8	24,064.6	20,687.1	20,994.3	22,445.3	24,064.6	25,096.1
Guaranteed fixed-income	12,375.6	8,679.8	5,456.7	7,694.5	6,858.1	5,828.2	5,456.7	5,351.5
Guaranteed equity <sup>7</sup>	9,966.6	15,475.7	15,417.5	16,418.9	16,183.3	15,909.7	15,417.5	15,352.0
Global funds	12,683.3	20,916.8	35,511.5	24,735.0	29,044.8	31,439.9	35,511.5	38,007.4
Passive management	17,731.1	23,601.6	19,477.8	22,701.7	21,601.5	20,972.4	19,477.8	19,320.7
Absolute return	11,228.1	12,215.2	16,705.9	13,474.6	15,142.6	16,371.3	16,705.9	17,321.0

1 Sub-funds which have sent reports to the CNMV excluding those in process of dissolution or liquidation.

2 From July 2015 on, side-pocket sub-funds data is only included in aggregate figures, but it is not included in any category.

3 Available data: January 2018.

4 Fixed income euro, Foreign fixed-income, Monetary market funds and Short-term monetary market funds.

5 Mixed euro fixed-income and Foreign mixed fixed-income.

6 Mixed euro equity and Foreign mixed equity.

7 Guaranteed equity and partial guarantee.

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

TABLE 3.7

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>1</sup>
<b>INVESTORS</b>								
Total financial mutual funds	7,682,947	8,253,611	10,287,454	9,332,934	9,569,922	10,068,296	10,287,454	10,541,461
Individuals	7,494,162	8,059,916	10,080,255	9,129,242	9,364,720	9,860,295	10,080,255	10,332,816
Residents	7,422,330	7,985,404	9,994,395	9,049,798	9,283,417	9,775,710	9,994,395	10,245,469
Non-residents	71,832	74,512	85,860	79,444	81,303	84,585	85,860	87,347
Legal entities	188,785	193,695	207,199	203,692	205,202	208,001	207,199	208,645
Credit Institutions	532	497	515	522	632	638	515	502
Other resident Institutions	187,395	192,381	205,804	202,317	203,662	206,445	205,804	207,273
Non-resident Institutions	858	817	880	853	908	918	880	870
<b>TOTAL NET ASSETS (million euro)</b>								
Total financial mutual funds	222,144.6	237,862.2	265,194.8	247,279.3	253,581.1	258,466.2	265,194.8	270,962.4
Individuals	181,868.0	195,567.5	218,429.6	203,626.4	209,000.6	212,672.1	218,429.6	223,141.4
Residents	179,232.4	192,743.0	215,290.8	200,701.5	206,029.8	209,623.1	215,290.8	219,948.0
Non-residents	2,635.6	2,824.5	3,138.8	2,924.9	2,970.9	3,049.0	3,138.8	3,193.4
Legal entities	40,276.6	42,294.8	46,765.1	43,652.9	44,580.5	45,794.1	46,765.1	47,821.0
Credit Institutions	483.0	374.3	342.2	433.5	455.1	462.7	342.2	521.7
Other resident Institutions	39,071.0	41,212.4	45,518.8	42,381.9	43,178.4	44,412.0	45,518.8	46,353.4
Non-resident Institutions	722.6	708.1	904.1	837.4	947.0	919.4	904.1	945.9

1 Available data: January 2018.

**Subscriptions and redemptions of financial mutual funds by category<sup>1, 2</sup>**

TABLE 3.8

Million euro	2015	2016	2017	2016			2017		
				IV	I	II	III	IV	
<b>SUBSCRIPTIONS</b>									
Total financial mutual funds	159,036.2	113,274.7	151,586.4	31,500.5	39,646.1	39,562.9	26,147.6	46,229.8	
Fixed-income	66,789.7	53,163.3	59,088.5	13,930.4	15,239.2	14,448.6	10,458.6	18,942.1	
Mixed fixed-income	36,441.2	11,065.3	20,513.3	3,522.6	6,295.0	5,690.0	3,312.3	5,216.0	
Mixed equity	13,771.0	4,250.6	10,452.2	1,588.1	2,812.7	3,037.3	1,669.3	2,932.9	
Euro equity	6,719.9	3,716.3	9,452.9	1,202.5	1,572.3	2,275.5	1,421.0	4,184.1	
Foreign equity	11,236.2	7,167.6	14,866.5	2,386.7	3,746.8	3,213.5	2,273.9	5,632.3	
Guaranteed fixed-income	562.4	2,005.3	986.9	724.7	482.0	230.3	91.5	183.1	
Guaranteed equity	1,993.2	7,942.5	2,413.1	1,994.9	1,488.7	375.8	234.3	314.3	
Global funds	9,636.1	8,914.5	21,571.9	1,673.4	5,074.2	6,824.7	3,612.7	6,060.3	
Passive management	3,350.5	10,195.7	2,374.0	3,162.0	889.5	504.0	491.5	489.0	
Absolute return	8,363.0	4,853.2	9,867.1	1,315.2	2,045.6	2,963.2	2,582.5	2,275.8	
<b>REDEMPTIONS</b>									
Total financial mutual funds	135,569.6	99,492.3	130,248.0	25,138.6	33,379.7	33,594.6	22,689.0	40,584.7	
Fixed-income	72,141.1	45,549.5	62,087.2	12,632.0	17,191.8	15,630.1	10,392.2	18,873.1	
Mixed fixed-income	15,273.7	14,242.9	18,011.6	3,333.5	5,143.7	5,294.9	3,069.6	4,503.4	
Mixed equity	5,617.2	7,280.8	4,942.6	1,210.3	1,283.3	1,357.6	859.1	1,442.6	
Euro equity	6,251.0	4,259.2	6,908.0	911.1	1,174.4	1,317.8	774.7	3,641.1	
Foreign equity	7,175.7	6,821.0	10,363.6	1,853.3	1,785.1	2,810.3	1,251.2	4,517.0	
Guaranteed fixed-income	7,369.8	5,208.0	3,876.9	881.2	1,314.0	1,008.8	1,023.2	530.9	
Guaranteed equity	4,593.0	2,464.1	3,001.5	560.0	644.1	815.3	688.7	853.4	
Global funds	3,830.8	5,334.6	8,587.6	1,269.8	1,723.8	2,471.4	1,970.9	2,421.5	
Passive management	9,614.7	4,405.7	6,954.8	1,530.9	2,070.9	1,719.0	1,225.7	1,939.2	
Absolute return	3,551.6	3,906.8	5,488.2	956.5	1,048.6	1,169.4	1,433.6	1,836.6	

1 Estimated data.

2 From July 2015 on, side-pocket sub-funds data is only included in aggregate figures, but it is not included in any category.

**Financial mutual funds asset change by category: Net subscriptions/redemptions and return on assets<sup>1</sup>**

TABLE 3.9

Million euro	2015	2016	2017	2016		2017		
				IV	I	II	III	IV
<b>NET SUBSCRIPTIONS/REDEMPTIONS</b>								
Total financial mutual funds	22,763.6	13,823.2	21,325.0	6,328.7	6,271.8	5,967.1	3,443.9	5,642.3
Fixed-income	-4,816.1	8,243.5	-3,638.0	1,307.1	-2,130.1	-892.2	-880.7	265.0
Mixed fixed-income	20,903.0	-4,750.8	2,890.5	198.8	1,167.0	305.8	731.0	686.6
Mixed equity	8,227.3	-5,194.5	5,498.6	338.7	1,515.0	1,706.0	761.2	1,516.4
Euro equity	467.2	-538.0	2,549.7	306.9	447.5	916.0	691.1	495.1
Foreign equity	4,110.2	-32.5	4,514.0	518.5	1,965.5	428.4	1,005.7	1,114.5
Guaranteed fixed-income	-8,093.5	-3,699.6	-3,262.6	-333.0	-956.6	-869.7	-1,047.6	-388.7
Guaranteed equity	-2,396.4	5,465.9	-309.5	1,465.3	886.2	-348.3	-349.3	-498.1
Global funds	5,787.9	7,801.3	13,405.9	417.4	3,361.5	4,306.1	2,109.0	3,629.5
Passive management	-6,274.9	5,603.4	-4,585.0	1,612.9	-1,181.4	-1,215.1	-738.1	-1,450.3
Absolute return	4,802.6	943.5	4,287.3	496.0	1,197.3	1,630.1	1,161.6	298.3
<b>RETURN ON ASSETS</b>								
Total financial mutual funds	680.1	1,909.9	6,022.6	2,416.2	3,150.8	336.0	1,449.2	1,086.6
Fixed-income	69.3	399.3	-24.1	-81.8	-57.3	-21.8	53.0	1.9
Mixed fixed-income	-425.2	25.1	451.4	222.4	236.4	4.1	160.7	50.2
Mixed equity	-294.8	2.2	577.8	370.6	333.9	-34.0	162.0	115.9
Euro equity	224.2	110.8	987.8	563.2	761.1	206.0	65.7	-45.0
Foreign equity	766.6	568.4	1,872.3	886.0	1,042.9	-121.0	445.4	505.0
Guaranteed fixed-income	52.1	3.9	39.4	-53.2	-28.8	33.3	17.8	17.1
Guaranteed equity	166.6	43.1	251.3	-54.3	57.0	112.7	75.7	5.8
Global funds	9.3	432.1	1,190.3	431.6	456.7	3.7	286.1	443.7
Passive management	185.5	281.5	472.9	116.6	286.6	114.9	115.7	-44.3
Absolute return	-72.7	43.7	203.4	15.2	62.2	37.9	67.1	36.2

<sup>1</sup> From July 2015 on, side-pocket sub-funds data is only included in aggregate figures, but it is not included in any category.

## Financial mutual funds return on assets. Detail by category<sup>1,2</sup>

TABLE 3.10

% of daily average total net assets	2015	2016	2017	2016		2017		
				IV	I	II	III	IV
<b>MANAGEMENT YIELDS</b>								
Total financial mutual funds	1.41	1.91	3.41	1.29	1.57	0.39	0.82	0.67
Fixed-income	0.85	1.24	0.59	0.05	0.08	0.13	0.23	0.16
Mixed fixed-income	0.14	1.26	2.22	0.85	0.87	0.30	0.66	0.40
Mixed equity	-0.12	1.45	4.36	2.71	2.32	0.17	1.15	0.88
Euro equity	4.41	3.38	11.14	7.48	8.92	2.43	1.04	0.07
Foreign equity	6.80	5.55	10.80	5.87	6.00	-0.10	2.54	2.64
Guaranteed fixed-income	1.25	0.79	1.14	-0.46	-0.22	0.62	0.43	0.44
Guaranteed equity	2.75	1.09	2.18	-0.22	0.52	0.86	0.64	0.15
Global funds	1.25	3.95	5.39	2.43	2.36	0.31	1.23	1.64
Passive management	1.65	2.11	2.81	0.66	1.41	0.68	0.70	-0.08
Absolute return	0.29	1.41	2.32	0.38	0.74	0.50	0.66	0.46
<b>EXPENSES. MANAGEMENT FEE</b>								
Total financial mutual funds	1.00	0.95	0.91	0.23	0.23	0.23	0.23	0.23
Fixed-income	0.66	0.58	0.54	0.14	0.13	0.14	0.14	0.13
Mixed fixed-income	1.15	1.12	1.05	0.27	0.27	0.26	0.26	0.26
Mixed equity	1.41	1.40	1.34	0.36	0.35	0.33	0.34	0.33
Euro equity	1.76	1.75	1.71	0.44	0.45	0.43	0.42	0.42
Foreign equity	1.71	1.71	1.69	0.45	0.44	0.41	0.42	0.42
Guaranteed fixed-income	0.84	0.68	0.48	0.15	0.13	0.13	0.12	0.11
Guaranteed equity	1.05	0.70	0.58	0.16	0.15	0.15	0.14	0.14
Global funds	1.06	1.26	1.07	0.28	0.28	0.26	0.26	0.27
Passive management	0.64	0.56	0.52	0.13	0.13	0.13	0.13	0.13
Absolute return	0.99	0.96	0.91	0.24	0.24	0.22	0.22	0.23
<b>EXPENSES. DEPOSITORY FEE</b>								
Total financial mutual funds	0.09	0.08	0.08	0.02	0.02	0.02	0.02	0.02
Fixed-income	0.08	0.07	0.07	0.02	0.02	0.02	0.02	0.02
Mixed fixed-income	0.09	0.09	0.09	0.02	0.02	0.02	0.02	0.02
Mixed equity	0.11	0.11	0.10	0.03	0.03	0.03	0.03	0.02
Euro equity	0.12	0.12	0.11	0.03	0.03	0.03	0.03	0.03
Foreign equity	0.12	0.12	0.10	0.03	0.03	0.03	0.03	0.02
Guaranteed fixed-income	0.06	0.06	0.05	0.02	0.01	0.01	0.01	0.01
Guaranteed equity	0.08	0.06	0.05	0.01	0.01	0.01	0.01	0.01
Global funds	0.08	0.10	0.09	0.02	0.02	0.02	0.02	0.02
Passive management	0.07	0.06	0.06	0.01	0.01	0.01	0.01	0.01
Absolute return	0.08	0.08	0.07	0.02	0.02	0.02	0.02	0.02

1 From July 2015 on, side-pocket sub-funds data is only included in aggregate figures, but it is not included in any category.

2 Annual data revised from 2014.

## Mutual funds quarterly returns. Detail by category<sup>1</sup>

TABLE 3.11

In %	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>2</sup>
Total financial mutual funds	0.89	0.98	2.42	1.35	0.16	0.56	0.33	0.77
Fixed-income	0.10	0.52	-0.13	-0.07	-0.03	0.05	-0.08	-0.01
Mixed fixed-income	0.16	0.27	1.10	0.58	0.02	0.38	0.12	0.45
Mixed equity	0.15	1.19	3.23	1.95	-0.12	0.80	0.57	1.11
Euro equity	3.44	2.61	11.16	8.57	2.06	0.55	-0.23	3.35
Foreign equity	7.84	4.15	8.75	5.67	-0.46	2.09	1.27	1.61
Guaranteed fixed-income	0.27	-0.03	0.72	-0.35	0.48	0.29	0.30	-0.02
Guaranteed equity	1.07	0.19	1.61	0.41	0.68	0.48	0.03	0.30
Global funds	2.45	1.99	4.46	2.08	0.07	0.94	1.31	1.31
Passive management	0.53	1.16	2.13	1.30	0.52	0.50	-0.20	1.00
Absolute return	0.12	0.38	1.44	0.50	0.27	0.43	0.23	0.45

1 From July 2015 on, side-pocket sub-funds data is only included in aggregate figures, but it is not included in any category.

2 Available data: January 2018.

## Hedge funds and funds of hedge funds

TABLE 3.12

	2015	2016	2017	2016		2017		
				IV	I	II	III	IV <sup>1</sup>
<b>HEDGE FUNDS</b>								
Investors/shareholders	2,819	3,089	2,930	2,930	3,080	3,308	3,444	3,582
Total net assets (million euro)	1,369.5	1,764.8	1,889.2	1,889.2	1,972.0	2,140.0	2,192.0	2,243.3
Subscriptions (million euro)	574.6	596.6	425.5	170.4	163.0	197.5	107.8	136.0
Redemptions (million euro)	293.8	260.5	376.6	126.8	161.2	255.1	82.4	94.5
Net subscriptions/redemptions (million euro)	280.8	336.1	48.9	43.6	1.8	-57.6	25.4	41.5
Return on assets (million euro)	52.0	56.3	75.5	52.5	81.0	22.8	26.6	9.8
Returns (%)	5.30	4.83	4.32	2.51	4.08	1.74	1.03	0.63
Management yields (%) <sup>2</sup>	7.39	6.17	4.68	3.68	4.95	1.73	1.85	0.36
Management fee (%) <sup>2</sup>	2.21	2.34	2.25	0.60	0.99	0.61	0.56	0.14
Financial expenses (%) <sup>2</sup>	0.32	0.51	0.10	0.00	0.00	0.00	0.00	0.00
<b>FUNDS OF HEDGE FUNDS</b>								
Investors/shareholders	2,734	1,265	1,237	1,237	1,231	2,393	3,534	3,591
Total net assets (million euro)	345.4	319.8	293.7	293.7	293.2	327.0	472.0	482.7
Subscriptions (million euro)	7.1	8.3	0.0	0.0	0.3	48.7	144.4	-
Redemptions (million euro)	40.8	54.9	28.1	1.1	1.3	6.5	0.0	-
Net subscriptions/redemptions (million euro)	-33.7	-46.6	-28.1	-1.1	-0.9	42.2	144.4	-
Return on assets (million euro)	28.9	21.0	2.1	8.1	0.5	-8.4	0.6	-
Returns (%)	8.48	6.16	0.90	2.83	0.16	-2.04	0.36	0.09
Management yields (%) <sup>3</sup>	9.72	6.61	-0.95	3.03	0.39	-1.97	0.51	-
Management fee (%) <sup>3</sup>	1.07	0.48	0.82	-0.21	0.21	0.42	0.36	-
Depository fee (%) <sup>3</sup>	0.08	0.04	0.06	-0.01	0.01	0.01	0.01	-

1 Available data: November 2017.

2 % of monthly average total net assets.

3 % of daily average total net assets.

## Management companies. Number of portfolios and assets under management<sup>1</sup>

TABLE 3.13

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>2</sup>
<b>NUMBER OF PORTFOLIOS<sup>3</sup></b>								
Mutual funds	1,760	1,748	1,676	1,741	1,721	1,712	1,676	1,660
Investment companies	3,333	3,231	2,824	3,045	2,981	2,898	2,824	2,808
Funds of hedge funds	11	7	8	8	9	9	8	8
Hedge funds	37	41	47	41	45	46	47	47
Real estate mutual funds	3	3	3	3	3	3	3	3
Real estate investment companies	6	6	4	7	7	7	4	4
<b>ASSETS UNDER MANAGEMENT (million euro)</b>								
Mutual funds	222,144.6	237,862.2	265,194.8	247,279.3	253,581.1	258,466.2	265,194.8	270,962.4
Investment companies	32,879.4	31,783.2	31,021.1	32,259.7	31,469.0	31,339.5	31,021.1	31,423.0
Funds of hedge funds <sup>4</sup>	319.8	293.7	482.7	295.4	327.0	472.0	482.7	-
Hedge funds <sup>4</sup>	1,764.8	1,889.2	2,243.3	1,912.9	2,140.1	2,192.0	2,243.3	-
Real estate mutual funds	391.0	370.1	360.0	369.7	360.5	360.3	360.0	360.1
Real estate investment companies	702.1	707.3	631.5	714.3	722.3	728.6	631.5	631.1

1 Until March 2016, it is considered as "assets under management" all the assets of the investment companies which are co-managed by management companies and other different companies.

2 Available data: January 2018

3 Data source: Collective Investment Schemes Registers.

4 Available data for IV Quarter 2017: November 2017.



## Foreign Collective Investment Schemes marketed in Spain<sup>1</sup>

TABLE 3.14

	2015	2016	2017	2016		2017		
				IV	I	II	III	IV
<b>INVESTMENT VOLUME<sup>2</sup> (million euro)</b>								
Total	108,091.6	114,990.2	150,420.6	114,990.2	127,534.6	137,341.6	141,828.0	150,420.6
Mutual funds	15,305.1	21,337.5	26,133.9	21,337.5	25,306.4	26,864.2	27,108.5	26,133.9
Investment companies	92,786.5	93,652.8	124,286.7	93,652.8	102,228.1	110,477.4	114,719.5	124,286.7
<b>INVESTORS/SHAREHOLDERS</b>								
Total	1,643,776	1,748,604	2,226,991	1,748,604	1,984,474	2,134,143	2,196,847	2,226,991
Mutual funds	298,733	372,872	445,299	372,872	431,295	448,554	460,374	445,299
Investment companies	1,345,043	1,375,732	1,781,692	1,375,732	1,553,179	1,685,589	1,736,473	1,781,692
<b>NUMBER OF SCHEMES</b>								
Total	880	941	1013	941	959	957	998	1013
Mutual funds	425	441	455	441	440	430	452	455
Investment companies	455	500	558	500	519	527	546	558
<b>COUNTRY</b>								
Luxembourg	362	391	429	391	405	411	424	429
France	282	286	292	286	284	270	289	292
Ireland	143	160	184	160	165	167	173	184
Germany	32	32	35	32	32	33	35	35
UK	31	32	33	32	32	32	33	33
The Netherlands	2	2	2	2	2	2	2	2
Austria	23	23	21	23	23	23	23	21
Belgium	4	4	5	4	5	5	5	5
Denmark	1	1	1	1	1	1	1	1
Finland	0	4	8	4	4	7	7	8
Liechtenstein	0	6	3	6	6	6	6	3

1 Exchange traded funds (ETFs) data is not included.

2 Investment volume: participations or shares owned by the investors/shareholders at the end of the period valued at that moment.

## Real estate investment schemes<sup>1</sup>

TABLE 3.15

	2015	2016	2017	2017				2018
				I	II	III	IV	I <sup>2</sup>
<b>REAL ESTATE MUTUAL FUNDS</b>								
Number	3	3	3	3	3	3	3	3
Investors	3,918	3,927	1,097	3,946	3,960	3,963	1,097	1,098
Asset (million euro)	391	370.1	360.0	369.7	360.5	360.3	360.0	360.1
Return on assets (%)	-6.66	-5.35	-2.60	-0.10	-2.37	-0.08	-0.06	0.02
<b>REAL ESTATE INVESTMENT COMPANIES</b>								
Number	6	6	4	7	7	7	4	4
Shareholders	583	674	327	517	490	487	327	327
Asset (million euro)	702.1	707.3	631.5	714.3	722.3	728.6	631.5	631.1

1 Real estate investment schemes which have sent reports to the CNMV, excluding those in process of dissolution or liquidation.

2 Available data: January 2018.





