

2.1 Equity markets

Share prices on Spanish equity markets followed a downward path for much of the year 2018, which worsened in the second half, leading the Ibex 35 to close the year with losses of 15%, which were spread across most sectors. In this context, equity market capitalisation fell as the amount of funds raised through capital increases was the lowest figure in recent years and insufficient to offset the falls in share prices. In addition, the unfavourable performance of stock markets limited the number of new companies going public.

Trading of Spanish shares remained stable in 2018, with a rearrangement between the activity on national markets, which fell following the slight recovery in 2017, and the activity on other regulated markets, multilateral trading facilities and competing trading venues, which continued to rise. This growth led to the market share of the latter standing close to 37% at the end of 2018 when taking total trading into account (lit plus dark).^{1, 2}

2.1.1 General overview

The Spanish equity markets started 2018 with significant falls, following on from the downward trend of the second half of 2017, in the expectation that the first steps to normalise European monetary policy would start to be taken shortly, following the path set by the Federal Reserve.³ Subsequently, the announcement of protectionist measures by the Trump Administration increased fears of a trade war between the United States and China⁴ and the rise in political uncertainties in Europe prevented a substantial recovery in prices. In this context, the Ibex 35 fell by 4.4% in the first quarter and ended the second quarter with hardly any changes.

The weak market performance in the first half of the year worsened along the second half as the aforementioned uncertainties were compounded by tensions between the Italian government and the European Union with regard to the Italian budget, the problems of some emerging economies where Spanish companies hold significant economic interests and, at the end of the year, the fear of a slowdown in the world economy and doubts relating to Brexit. The Ibex 35 fell by 2.4% in the third quarter and by a further 9% in the fourth. This raised the annual losses to 15%,

1 Both type of trading (lit plus dark) are subject to market rules but to different transparency regimes, less demanding for dark trading.

2 Only taking lit trading into account, the market share of the competing trading venues stands at 38%.

3 The Federal Reserve has raised interest rates nine times in a row since 2015. For further details about the monetary policy decisions of the leading central banks, see Heading 1.1.

4 The first measure of the trade war was the United States and China establishing a series of reciprocal tariffs.

in line with the European Eurostoxx 50 index and with other European benchmark indices,⁵ with the exception of the German Dax 30, which recorded the worst performance of them all.

The implied volatility of the Ibex 35 remained low for most of the year, while recording temporary upturns linked to various episodes of uncertainty. These upturns were similar to those of other European indices but lower than those recorded by US indices. At the end of the year, the implied volatility stood at 21.8%, slightly higher than in December 2017 (15.5%). The annual averages were not very different: 15.1% in 2018 and 15.5% in 2017, and similar to those of most European indices with the exception of the Italian index, which recorded higher volatility.⁶

Stock-market capitalisation fell sharply and stood at 595.66 billion euros, the lowest figure in the last 5 years. This reduction is the result of the fall in share prices (which amounted to 15%,⁷ the worst performance since 2010), the lower value of the new companies admitted to trading compared with delisted companies and the drop in the amount of funds raised through capital increases, which also recorded their lowest figure of the last 5 years.

The volumes traded in the Spanish stock market recovered in the first half-year and fell in the second, coinciding with the time of the largest shift of trading to other regulated markets, multilateral trading facilities and competing trading venues. In the year as a whole, equity trading on official secondary markets fell by 8% to around 580 billion euros, its lowest volume since 2003. Domestic stock markets continue to account for a large part of the trading of the Spanish securities listed on them, but they once again lost relative weight in favour of their competitors, which at year-end accounted for around 40% of total trading, 6 percentage points (pp) up on 2017.⁸ The trend towards fragmentation of the Spanish market is therefore consolidated as it now stands at a similar level to that of the main European markets, which had already passed through this process.

As is the norm, non-resident investors once again played a very important role in the Spanish equity market, both in terms of trading and in ownership, which reached a record high at the end of 2017. According to the BME's *Market Report 2018*, foreign investors accounted for a little over 80% of trading, maintaining their status as the main pillar for market liquidity. For their part, Spanish households accounted for a little over 20% of share ownership, worth 111.43 billion euros in September 2018, 14% less than at year-end 2017.⁹

Table 2.1.1 compares the size of the main international equity markets by using capitalisation and trading to nominal GDP ratios. In 2018, the capitalisation to GDP ratio decreased for all markets as a result of the price falls in the leading

5 In 2018, the European Eurostoxx 50, Dax 30, Cac 40 and Mib 30 indices fell by 14.3%, 18.3%, 11.0% and 16.1%, respectively, while the US Dow Jones, S&P 500 and Nasdaq indices fell by 5.6%, 6.2% and 3.9%, respectively. The Japanese Nikkei 225 and Topix indices recorded annual losses of 12.1% and 17.8%, respectively.

6 The average implied volatility of the European Eurostoxx 50, Dax 30, Cac 40 and Mib 30 indices was 13.2%, 14.9%, 13.6% and 19.4% respectively, while for the US Dow Jones, S&P 500 and Nasdaq indices, it stood at 14.5%, 13.3% and 18.5%, respectively.

7 The Ibex 35 fell 15% in the year, as did the IGBM.

8 Includes trading subject to market rules (lit and dark).

9 According to the *Financial Accounts* of the Bank of Spain.

international stock markets in the context of GDP growth worldwide, with particularly significant falls in Canada and China. The falls in the United States and in Europe were more moderate, reflecting the more discreet and stable performance of these markets. There is greater heterogeneity in the case of trading, with rises in the United States and, to a lesser extent, in Canada and Japan, stability in regulated European markets and a fall in China. As in 2017, the performance of trading in regulated European markets was affected by the impact of competition from other regulated markets, MTFs and competing trading venues, as well as by volatility remaining at low levels, which discouraged algorithmic and high-frequency trading (HFT). The fall in the ratio in Spain was sharper than in other European markets as it was affected by the loss of market share to the benefit of its competitors.

**Market capitalisation and trading on regulated markets
as a percentage of nominal GDP**

TABLE 2.1.1

	Market capitalisation ¹		Trading volume	
	2017	2018	2017	2018
USA ²	162.7	148.5	131.1	176.2
Canada	173.7	148.8	94.4	106.0
China ³	100.2	75.4	147.2	114.5
Japan	127.7	106.6	118.6	126.9
London Stock Exchange ⁴	128.8	107.8	65.7	68.9
Euronext ⁵	100.3	86.4	46.7	49.4
Germany	57.8	45.3	39.8	45.4
Italy ⁴	37.3	30.9	36.6	35.7
Spain	60.2	49.3	55.8	49.0

Source: World Federation of Exchanges; Eurostat; statistical offices of the United States, Canada and Japan; Datastream and CNMV. (1) In local currency, the market capitalisation figures correspond to the last working session of the year. (2) The numerator is the combined total of the NYSE Euronext US and Nasdaq. (3) Includes data from the Hong Kong, Shanghai and Shenzhen stock markets, as well as the GDP of the People's Republic of China and Hong Kong. (4) Although Borsa Italiana was integrated into the LSE Group, here the percentages of capitalisation and trading over GDP corresponding to each country are provided separately. (5) The denominator is the sum of the nominal GDP of France, the Netherlands, Belgium and Portugal.

2.1.2 Listed companies and capitalisation

Spanish stock markets closed 2018 with 148 listed companies, two less than at year-end 2017.¹⁰ Five companies joined the electronic market, all of them newly listed companies: one real estate company (Metrovacesa),¹¹ one SOCIMI (Arima Real Estate), one energy company (Solarpack), one mining company (Berkeley Energía) and one restaurant operator (Amrest Holding). Meanwhile, there were seven delistings, six from the electronic market and one from the open outcry market.¹² Among the companies delisted from the electronic market, four were delisted following

10 This total refers to the official equity markets and hence does not include the companies listed on the Latibex or on the MAB, which are multilateral trading facilities.

11 Metrovacesa returned to the market in February 2018 after being delisted in 2013 as a result of a delisting bid.

12 Annex I.3 provides further information on new listings and delistings.

the settlement of the corresponding takeover bids (Abertis, Saeta Yield, Funespaña and Sotogrande), another as a result of a merger by acquisition (Axiare Patrimonio, SOCIMI, which was taken over by Inmobiliaria Colonial, SOCIMI) while another was delisted as a result of a resolution of the CNMV's Executive Committee (Reyal Urbis, which was in liquidation following an insolvency procedure). In addition, Ronsa, S.A. was delisted from the open outcry market of the Bilbao Stock Exchange.

Number of companies listed on Spanish stock markets¹

TABLE 2.1.2

	All markets	Electronic market			Open outcry	Second market
		Total	National	Foreign		
Listed at 31/12/17	150	134	127	7	12	4
Listed at 31/12/18	148	133	125	8	11	4
New listings in 2018	5	5	4	1	0	0
New listings	5	5	4	1	0	0
Listed due to merger	0	0	0	0	0	0
Change of market	0	0	0	0	0	0
Delistings in 2018	7	6	6	0	1	0
Delistings	6	5	5	0	1	0
Delistings due to mergers	1	1	1	0	0	0
Change of market	0	0	0	0	0	0
Net change in 2018	-2	-1	-2	1	-1	0

Source: CNMV. (1) Totals do not include MAB, Latibex or ETFs.

Stock market capitalisation fell by a little over 15% in 2018 to 592.66 billion euros, its lowest level for the last 5 years. This decrease was mainly the result of the fall in the value of companies,¹³ but also due to the fact that the value of the delisted companies was greater than that of the new companies admitted to trading and the fact that the amount of the funds raised through capital increases was the lowest of the last five years.

The performance of the prices of the sectors represented in the Spanish stock market was unfavourable in most cases, although the falls were not across the board, either in terms of sectors or in terms of shares. The greatest falls were recorded by banks, companies from the transport and communications sector, companies from the textile sector, the mining sector and from the basic metals sector. The impact of these falls on the general index largely depends on the weightings of the sectors, which showed significant differences in the case of Spain, with the financial sector being particularly important (see Table 2.1.4 and Annexes I.5 and I.7). The largest falls in terms of capitalisation corresponded to banks and, to a lesser extent, to companies in the transport and communications sector, which lost one of its leading members following the settlement of the takeover bid for Abertis. The loss of this company, together with the fall in stock market prices, significantly reduced the capitalisation of the sector. It is also important to note the negative performance, for the second consecutive year, of the leading company in the textile sector, which suffered the effects of the doubts relating to its business model in a context of sharp growth in e-commerce competitors.

Capitalisation¹ of equity on Spanish stock markets

TABLE 2.1.3

Securities markets
and their agents
Markets and issuers

Million euros

	2015	2016	2017	2018	% change 18/ 17
All markets	626,700.2	630,995.3	701,029.6	592,662.6	-15.5
Electronic market	625,639.3	629,589.7	699,691.2	591,166.2	-15.5
National	624,640.4	628,080.6	697,909.0	590,057.8	-15.5
Foreign ²	998.9	1,509.1	1,782.3	1,108.4	-37.8
Open outcry ³	1,040.3	1,291.6	1,288.5	1,459.1	13.2
Madrid	296.9	289.9	165.9	219.4	32.3
Barcelona	887.7	1,136.6	1,134.3	1,318.4	16.2
Bilbao	943.3	54.0	54.0	56.5	4.5
Valencia	150.1	349.2	211.3	257.0	21.6
Second Market	20.6	114.1	49.9	37.4	-25.2

Source: CNMV. (1) Only includes capitalisation of companies that were traded at some time during the year. Excludes Latibex, MAB and ETFs. (2) The capitalisation of foreign companies listed on Spanish markets is based on the number of shares registered by Iberclear. (3) The market capitalisation of companies traded by open outcry in more than one market has been included in the figures for each market at the price for that market, but only once in the total for all markets.

The increases, which on average were smaller than the falls, were concentrated in companies from the energy sector (electricity companies), which, in turn, was the sector that recorded the largest growth in capitalisation. In addition, the capitalisation of the food and the real estate sectors also rose as each sector received a new medium-sized company: a new restaurant company in the case of the former and a real estate company in the case of the latter.

In terms of capitalisation, concentration in the market remains high, although there is a little more dispersion than in the previous year. As a result of this greater dispersion, in 2018 a total of 7 securities accounted for around half the market capitalisation, compared with the 6 companies that were necessary the previous year, although once again 17 Ibex 35 securities accounted for 75% of capitalisation. Similarly, as has been the case in previous years, the percentage of the 5 Spanish securities included in the Eurostoxx 50 index in the total capitalisation of the Spanish stock market continued to fall to stand at 42%, its lowest level of recent years (44%, 47% and 55% in 2017, 2016 and 2015, respectively), which reflects the greater growth of medium-sized companies compared with the traditional large companies and leading banks.

Number of listed companies and capitalisation by sector¹

TABLE 2.1.4

Million euros

Sector	2017	2018	2017	2018	% change 18/17
Oil	1	1	22,521.5	21,505.7	-4.5
Energy	9	9	95,910.3	105,712.9	10.2
Mining & basic metals	7	8	7,677.4	5,891.8	-23.3
Cement and construction materials	3	3	3,157.7	3,060.5	-3.1
Chemical and pharmaceuticals	8	8	19,362.0	18,774.1	-3.0
Textile and paper	10	10	94,443.0	73,879.3	-21.8
Metal-mechanical	15	15	13,402.8	11,213.2	-16.3
Food	13	14	7,353.5	8,708.8	18.4
Construction	9	8	35,730.5	33,827.2	-5.3
Real estate and SOCIMIs	20	19	16,023.6	17,197.6	7.3
Transport and communications	8	7	111,801.3	83,934.6	-24.9
Other non-financial	30	29	66,976.4	57,173.8	-14.6
Total non-financial sector	133	131	494,359.9	440,879.5	-10.8
Banks	10	10	190,682.5	137,697.9	-27.8
Insurance	2	2	12,679.8	11,056.6	-12.8
Portfolio companies	5	5	3,307.4	3,028.7	-8.4
Total financial sector	17	17	206,669.8	151,783.2	-26.6
Total	150	148	701,029.6	592,662.6	-15.5

Source: CNMV. (1) Only includes capitalisation of companies that were traded at some time during the year. Excludes Latibex, MAB and ETFs.

2.1.3 Listings, issues and public offerings

80 capital increases were carried out in 2018, 4 fewer than in the previous year, corresponding to a total of 45 companies listed on Spanish stock markets, the same number as in 2016 and 2017 (see Annexes I.1 and I.2 for further details). The decrease in the number of transactions of this type was allied to a significant decrease in the amount of funds raised, which amounted to a little over one third of the amounts obtained in the previous year, with a total of 11.33 billion euros.

65% of the capital increases were aimed at raising funds compared with 87% the previous year, while the remaining 35% were capital increases against reserves. The value of capital increases raising funds fell significantly, from 25.79 billion euros in 2017 to a little under 7.4 billion euros in 2018. This fall was the result of the lower needs of the financial sector, which has increased its capital base and strengthened its balance sheets on an ongoing basis over recent years, as well as the conclusion of the capital restructuring of the major industrial companies that has been undertaken in recent years.

As in 2017, capital increases with non-monetary consideration accounted for a significant portion of capital increases aimed at raising funds, although their amount fell significantly compared with the previous year. In contrast, accelerated book builds grew to almost 2 billion euros (822 million euros in 2017). Particularly noteworthy was the placement of Amrest Holding for an amount of 1.91 billion euros, which in turn joined the electronic market through a direct listing. The volume of

the other capital increases aimed at raising funds was low: even traditional increases with pre-emptive subscription rights only amounted to 900 million euros, the lowest volume recorded over recent years.

Capital increases, 15 of which were associated with scrip dividend transactions (2 more than in the previous year) rose slightly (3.5%) after falling for 3 years running (see Table 2.1.5). This slight increase, both in terms of number and volume, might represent a change in the trend of the dividend policies followed by some companies in recent years, in which they had chosen to cancel this format or reduce the amount in favour of the traditional policy of paying in cash. Faced with a scenario of lower growth prospects, companies might be choosing to reduce remuneration in cash again to the benefit of payment in shares with the aim of retaining more financial resources on the balance sheet for the future.

Primary and secondary public offerings¹

TABLE 2.1.5

Million euros

	2015	2016	2017	2018	% change 18/17
Capital increases aimed at raising funds	19,106.1	13,846.7	25,786.2	7,389.8	-71.3
With pre-emption right	7,932.6	6,513.3	7,831.4	888.4	-88.7
Without pre-emption right ²	0.0	807.6	956.2	200.1	-79.1
Accelerated book builds	8,092.3	0.0	821.8	1,999.1	143.3
Increases with non-monetary consideration ³	365.2	1,791.7	8,469.3	2,999.7	-64.6
Capital increase by conversion	1,868.7	2,343.9	1,648.8	388.7	-76.4
Other	847.4	2,390.2	6,058.8	913.8	-84.9
Bonus issues	9,627.8	5,898.3	3,807.3	3,939.7	3.5
Of which, scrip dividend	9,627.8	5,898.3	3,807.3	3,915.2	2.8
Total capital increases	28,733.9	19,745.1	29,593.6	11,329.5	-61.7
Secondary offerings	8,331.6	500.6	2,944.5	733.7	-75.1

Source: CNMV. (1) Does not include data from the MAB, ETF or Latibex. (2) Primary offerings. (3) Capital increases with non-monetary consideration have been recorded at market prices.

Despite the growth of the economy and the interest of several companies in going public over the year, the poor performance of stock markets led to these plans being cancelled or delayed. These include cancellation of the operation of the second largest oil company in Spain (Cepsa), the prospectus of which had even been registered with the CNMV. There was only one public offering, that of a real estate company (Metrovacesa) in an amount of a little over 700 million euros, merely a quarter of the almost 3 billion euros raised in the 7 public offerings in 2017. The only offering in 2018 took place in the electronic market, where there were two companies that went public through a primary offering, one SOCIMI and one energy company.

2.1.4 Trading

Spot trading

The trading of Spanish securities admitted to trading on Spanish markets remained practically unchanged in 2018, standing at 931.02 billion euros (933.42 billion euros

in 2017). Trading in these securities has followed a downward trend for several years, which was temporarily interrupted in 2017, but which resumed in 2018. Furthermore, trading on Spanish markets continued its decline. This trend began following implementation of MiFID I¹⁴ has been consolidated with MiFID II and MiFIR.¹⁵ This legislation, which allows securities trading in trading venues other than the home regulated market, has led to a process of fragmentation characterised by a shift of some securities trading to these competing venues.¹⁶ The fragmentation began earlier in other European countries and although Spain joined this trend subsequently, the market shares of competing markets in the trading of Spanish securities has now reached levels similar to those of other European countries.

As mentioned above, the trading of securities in Spanish stock markets recovered slightly in 2017, which continued in the first few months of 2018. This trend was reversed in the second half of the year as a result of intensified competition from other trading venues. The amount traded over the year as a whole in Spanish markets fell by 8.5% to 579.81 billion euros. This amount still accounts for the bulk of the trading and, in relative terms, corresponds to a little over 62% of the total (compared with 68% in 2017 and 72% in 2016).

At the same time, the amount traded through BME's competing trading venues grew by 17.2% to 350.8 billion euros in 2018 (see Table 2.1.6). Their market share stood at around 40% of total trading of Spanish securities,¹⁷ a percentage that has practically doubled over the last three years. The increase in trading in these venues also took place in a context of low volatility that does not favour some types of trading such as algorithmic and high-frequency trading (HFT), which are traditionally executed to a greater extent in such venues.

Particularly noteworthy once again among the competing trading venues was the Cboe Global Markets (Cboe) regulated market, which operates through two different order books, Chi-X and BATS. Aggregate trading on this market grew to over 278 billion euros, accounting for almost 80% of the market share of these alternative trading venues and 30% of the total amount traded with Spanish equity securities admitted to trading on official Spanish markets. Cboe thus consolidates its position as BME's main competitor as its volume of trading is now almost 50% of the size of the latter, compared with 30% in 2017. Similarly, Cboe has changed the composition of the trading between its two order books, so that the relative weight of Chi-X has been falling in favour of BATS, which has recorded a fourfold increase in trading over the last three years. Other competitors have gradually been losing relative weight, with the only significant one being Turquoise, with a market share of a little over 12% of the trading of BME's competitors.

14 MiFID I entered into force in 2007 and allowed the trading of securities in European regulated markets and MTFs other than the home regulated markets.

15 They were implemented in 2017.

16 This process of relocation from traditional regulated markets to competing trading venues has spread throughout Europe, affecting an increasing number of markets, including small-sized markets. One of the leading trading venue operators – Cboe Global Markets (Cboe) – performs this activity in a total of 15 European markets, including smaller markets such as Helsinki and Copenhagen.

17 Calculation made on trading subject to market rules (lit and dark).

Total trading in Spanish equity listed on official Spanish markets¹

TABLE 2.1.6

Securities markets
and their agents
Markets and issuers

Million euros

	2014	2015	2016	2017	2018	% change 18/17
Total	1,002,992.8	1,162,979.7	878,329.9	933,416.3	931,019.3	-0.26
Admitted on SIBE	1,002,095.8	1,161,222.9	877,408.4	932,763.1	930,607.1	-0.23
BME	849,934.5	925,978.7	634,914.5	633,385.7	579,810.4	-8.46
Chi-X	95,973.0	150,139.9	117,419.4	117,899.2	106,869.7	-9.36
Turquoise	28,497.5	35,680.5	51,051.8	44,720.1	42,883.4	-4.11
BATS	18,671.0	35,857.6	44,839.8	75,411.6	171,491.3	127.41
Other ²	9,019.8	13,566.2	29,182.9	61,346.5	29,552.2	-51.83
Open outcry	92.5	246.1	7.9	8.1	8.2	1.50
Second Market	0.7	13.8	3.2	0.7	0.8	8.56
ETF³	803.9	1,496.8	910.4	644.5	403.2	-37.44

Source: Bloomberg and CNMV. (1) Includes trading subject to market or MTF rules (lit plus dark) of equity instruments admitted to trading on Spanish official secondary markets and identified by means of an ISIN issued in Spain. Hence, this does not include foreign securities admitted to trading on those markets whose ISIN is not issued in Spain. (2) It is calculated as the difference between the amount traded of the EU Composite calculated by Bloomberg for each share and the amount traded for the markets and MTF included in the Table, and hence includes trading on other regulated markets and MTFs, as well as OTC trading. (3) Only ETFs with Spanish ISIN.

In the main European regulated markets considered as a whole,¹⁸ trading fragmentation in 2018 was very similar to the Spanish case, although some of them recorded a slight reversal of this trend with a certain recovery of the share of the regulated market to levels above 60%. In aggregate terms, around 40% of European equity trading subject to market rules takes place outside the regulated market on which the securities are admitted to trading. Even though one of the basic aims of the new regulatory framework established by the MiFID II Directive and the MiFIR Regulation was to increase transparency levels in the market and redirect OTC trading to regulated environments, reported trading (including systematic internalisation) would have fallen very slightly to under 40% of total trading, which reveals the reluctance of operators to increase the transparency of their transactions and redirect OTC trading to environments subject to greater transparency.

Trading on official markets operated by BME

Equity trading on the markets operated by BME took place predominantly on the SIBE trading platform (see Table 2.1.7) – known as the electronic market – with a reduction in trading on the open outcry market and on the second market to insignificant levels. Aggregate trading of the two MTFs operated by BME – MAB and Latibex – barely amounted to 1% of the volume traded on the SIBE. The amount traded on the SIBE fell by 9% and stood at a little over 586 billion euros,¹⁹ while the number of trades fell by 13.2% to a little over 44 million. The number of trades has fallen for 4 years running as a result of both greater competition from other trading venues and the fall in market volatility, which discourages the activity of high-frequency trading

18 Including the main stock markets in the euro area and the London securities markets.

19 This figure includes the trading of Exchange-Traded Funds (ETFs), which amounted to 3.03 billion.

and the number of high-frequency trades. Despite the fall in the number of total trades, the fall in the number of high-frequency trades meant that the cash average per trade rose to 13,284 euros, 4% up on the previous year, with 2 consecutive years of rises.²⁰

Equity trading on markets operated by BME

TABLE 2.1.7

Million euros

	2015	2016	2017	2018	% change 18/17
Total	957,990.7	652,226.2	649,883.3	590,852.6	-9.1
Official markets	951,290.3	647,003.2	644,766.7	586,364.1	-9.1
SIBE	951,030.4	646,992.6	644,757.8	586,355.1	-9.1
of which ETFs	12,633.8	6,045.2	4,464.1	3,027.6	-32.2
Open outcry	246.1	7.5	8.1	8.2	0.9
Madrid	19.4	3.2	1.8	0.8	-57.4
Bilbao	7.5	0.0	0.1	0.0	-24.3
Barcelona	219.1	4.2	6.3	7.4	17.4
Valencia	0.1	0.0	0.0	0.0	21.0
Second Market	13.8	3.2	0.7	0.8	8.6
MAB	6,441.7	5,066.2	4,985.8	4,336.9	-13.0
Latibex	258.7	156.7	130.8	151.6	15.9

Source: CNMV.

The number of orders fell by 3.1% on 2017 to 409.7 million, the lowest figure since 2014.²¹ The order to trade ratio rose to 9.26 (8.3 in 2017), but so did the amount per trade, which confirms the fall in algorithmic and high-frequency trading as many orders were eventually executed or cancelled as a result of the scenario of low market volatility.²²

With regard to the types of trading on the electronic market, Table 2.1.8 shows the fall in trading of all “regular trading”, with falls of over 10% in the amount traded in the two most significant types: order-based trading (52% of the total) and block trading (35%). In terms of trading volume, order-based trading fell by almost 36 billion euros, while block trading fell by almost 28 billion euros. Regulated markets, multilateral trading facilities and trading venues that are competitors of BME account for a large part of block trading. The volume attributed to other types of trading grew by 53% as a result of the high volume of trading corresponding to the settlement of the takeover bid for Abertis.

20 Algorithmic trading is characterised by a high number of orders that are usually of a small volume, which leads to a reduction in the average size of the trades.

21 In 2015, 2016 and 2017, there were 645, 611 and 422 million orders, respectively.

22 High frequency trading is characterised by the performance of a very high number of trades of securities with a very short average life (less than one session), the aim of which is to benefit from small changes in the price of securities. This type of trading is best suited to scenarios of high market volatility.

Trading on BME by type¹

TABLE 2.1.8

Securities markets
and their agents
Markets and issuers

Million euros

	2014	2015	2016	2017	2018	% change 18/17
Regular trading	831,962.6	903,397.2	618,600.9	619,108.6	552,716.8	-10.7
Order-based	453,294.9	475,210.0	350,783.5	335,917.3	300,107.8	-10.7
Applications	73,056.8	96,187.7	68,631.6	51,316.0	48,644.1	-5.2
Block trades	305,610.8	331,999.5	199,185.8	231,875.3	203,965.0	-12.0
Off-hours	7,568.9	3,137.9	2,196.1	2,373.8	1,667.3	-29.8
Other types	24,912.5	31,861.5	20,150.4	18,811.3	28,833.5	53.3

Source: CNMV. (1) Does not include data for Latibex, MAB or ETFs.

Stock market trading continued to be highly concentrated in a small number of shares. In 2018, 6 and 14 shares were necessary to account for 50% and 75%, respectively, of the cash amount traded on SIBE (5 and 16 shares in 2017). The shares with the highest level of trading were the same as in the preceding two years – Banco Santander, BBVA, Telefónica, Inditex and Iberdrola – all of which are components of the Spanish Ibex 35 index and the European EuroStoxx 50 (see Annexes I.6 and I.8 for further details regarding trading and distribution).

Short positions

The aggregate position of short sales according to information received by the CNMV rose slightly during 2018 to a year-end 0.84% of total share capitalisation of the electronic market, more than the 0.7% at year-end 2017. At the end of the year, there were 5 and 12 shares in short positions of 5% and 2% of their individual capitalisation, respectively, compared with the 5 and 16 shares in the same situation in 2017. Three companies of the distribution, telecommunications, and engineering sectors, which headed up this list in the previous year, remained among the individual shares with the highest short positions. There were also significant short positions in other shares from the construction, real estate, media and banking sectors.

Short positions

TABLE 2.1.9

	% short positions/ capitalisation ¹	No. companies with short positions > 2% ²	No. companies with short positions > 5% ²
2014	0.57	14	2
2015	0.86	20	7
2016	0.97	18	6
2017	0.70	16	5
2018	0.84	12	5

Source: CNMV. (1) The figure for aggregate net short positions includes the sum at the end of each reference year of the individual positions declared (equal to or greater than 0.5%), plus the sum of all positions equal to or greater than 0.2% and less than 0.5% for all securities included in the SIBE. (2) Number of companies whose aggregate net short positions at the end of each reference year were greater than 2% and 5%, respectively, of their capital (including the sum of the individual positions declared - equal to or greater than 0.5% - plus the sum of all positions equal to or greater than 0.2% and less than 0.5%).

The information on aggregate short positions provided in this section comes from communications made in compliance with the rules set out in Regulation 236/2012 and its delegated regulations, which make it obligatory to report short positions if they account for 0.2% of share capital and therefore do not include short positions accounting for smaller percentages.

The CNMV decided to stop publishing information on short positions as from 2019 and apply the same criteria as other European regulators for several reasons. On the one hand, this periodical publication was a particular feature of the Spanish market, which made it somewhat asymmetric compared with other European securities subject to supervision by other competent authorities. In addition, the fact the prevailing European regulations on short positions oblige the same percentage thresholds to be applied for reporting, regardless of the capitalisation of the company, means that information on short positions of companies with low market capitalisation may be wrongly interpreted and give rise to a perception of a greater accumulation of these positions compared with those of larger companies, with the consequent generation of distorted signals to the market. After analysing the issue and undergoing a consultation process with the sector, the CNMV decided to stop publishing these fortnightly positions.

2.1.5 Takeover bids (OPAs)

In 2018, 6 takeover bids for a potential amount of 23.84 billion euros were authorised (25.3 billion if we include the acquisitions agreed on previously), much higher than the figure recorded in recent years and the highest figure in recent years (see Table 2.1.10). A list of the takeover bids authorised during the last year can be found in Annex I.9.

By volume, the largest transaction was the voluntary takeover bid by Hochtief AG for Abertis Infraestructuras, S.A. in an amount of 18.18 billion euros, which accounted for over 75% of the total amount. This bid competed with that made initially by Atlantia SpA, which had been authorised the previous year. The process concluded in 2018 with an agreement between the two bidders.

The other bids were a delisting bid for Funespaña, S.A. made by its controlling shareholder, Mapfre; a mandatory bid for NH Hotel Group, as the Thai group Minor had acquired an interest greater than 30%; and another three voluntary bids to take over and subsequently promote delisting made by Terp Spanish Holdco, S.L.U. for Saeta Yield, S.A., Alzette Investment, S.à R.L. for Hispania Activos Inmobiliarios SOCIMI, S.A., and DS Smith, Plc for Papeles y Cartones de Europa, S.A. (Europac).

All the bids were made with payment in cash at a price defined as fair by applicable legislation and in all except the bid for NH Hotel Group, the price was supported by a valuation report. Similarly, the four voluntary bids were made subject to certain conditions allowed in this type of transaction, which were met in all cases.

The results obtained in the bids for Saeta and Europac allowed in both cases a squeeze out of all the shareholders as they both received acceptance equal to or greater than 90% of the shares covered by the respective bids, with the bidders obtaining 90% or more of the capital, which led to the delisting of the shares.

Takeover bids

TABLE 2.1.10

Securities markets
and their agents
Markets and issuers

Million euros

	2014	2015	2016	2017	2018
Authorised¹					
Number	7	9	5	5	6
Potential amount	478	5,049	1,682	18,183	23,842
Potential amount plus agreements prior to acquisition ²	644	7,360	1,743	19,902	25,298
Carried out³					
Number	7	8	5	4	6
Amount	216	4,394	853	1,309	19,582
Amount plus agreements prior to acquisition ²	382	6,705	914	1,502	21,038

Source: CNMV. (1) Authorised during the year. (2) Potential amount of takeover bids plus cash volume of acquisitions agreed prior to each bid. (3) All bids authorised during the year, even if completed in the following year, except where the bid was unsuccessful or was withdrawn. Does not include the amounts for squeeze outs.

2.1.6 Multilateral trading facilities

Latibex

Securities traded on Latibex performed positively in most quarters of the year, in the context of high volatility of exchange rates but stable commodity prices²³ and relatively high oil prices.²⁴ Latin American economies found themselves in a process of slowing economic growth – with particular problems in the Argentinian economy. However, they improved on expectations in the second half of the year, particularly the Brazilian economy,²⁵ which allowed a significant gain in share prices over those months as Brazilian companies are widely represented in this market. As was the case in the previous year, the depreciation of the Brazilian real weighed down on the prices of the Latibex index, which was partially offset by the rising value of the Mexican peso.²⁶ In this context, the two indices representative of Latin American securities included in this MTF, the FTSE Latibex All-Share and the FTSE Latibex Top, recorded gains of 10.3% and 14.8% in 2018, respectively, compared with 9% and 7.3% in 2017.

It should be noted that the securities traded on Latibex²⁷ account for a very small part of the total number of shares admitted to trading for the different companies in their main trading markets in Latin America. In fact, the market value of the shares admitted to trading on this MTF – which fell by 4.5% to 233.3 million euros – accounts for only 0.1% of the capitalisation of the companies traded there. As in previous years, most of the balance registered in Iberclear corresponded to Brazilian companies, although their relative weight fell to 70% to the benefit of Mexican companies, whose share rose to 29%. The total number of companies traded on this market was 19, one fewer than the previous year.

23 The CRB raw industrials index in euros fell by 2% in 2018 (-8.5% in 2017).

24 Oil prices rose from an average of 54.75 dollars per barrel in 2017 to 71.67 dollars in 2018.

25 The IMF expects its growth to stand at 1.3% in 2018 (1.1% in 2017), but raised its forecast to 2.5% in 2019.

26 In 2018, the Brazilian real depreciated by 11.2% against the euro, while the Mexican peso appreciated by 4.2%.

27 These securities must be previously registered in Iberclear.

Unlike what happened with the market value of the companies traded on Latibex, the trading of these shares grew by 15.8% to 151.6 million euros, of which 65% corresponded to Brazilian companies and 35% to Mexican companies. The trading of shares of Peruvian companies stood at very low levels while there were hardly any transactions with the shares of Argentinian companies.

Companies listed on Latibex by country

TABLE 2.1.11

Million euros

Country	No. of companies		Negotiable securities at market price ¹			Trading volume		
	2017	2018	2017	2018	% change 18/17	2017	2018	% change 18/17
Argentina	2	2	4.2	2.4	-43.4	0.2	0.0	-84.3
Brazil	10	10	194.2	155.4	-20.0	108.3	98.2	-9.3
Mexico	7	6	34.9	64.8	86.0	0.0	53.1	142.4
Peru	1	1	0.0	0.0	0.0	0.0	0.3	-35.2
Total	20	19	233.3	222.7	-4.5	130.8	151.6	15.8

Source: CNMV. (1) Securities deposited in Iberclear.

The Alternative Stock Market (MAB)

The various segments traded on the MAB multilateral trading facility once again recorded a similar performance to that of the previous year, maintaining the number of companies in expansion, noteworthy growth in the number of SOCIMIs and a slight decline in the number of SICAVs.

Companies listed on MAB by segment

TABLE 2.1.12

Million euros

	No. of companies		Market capitalisation ¹			Trading volume		
	2017	2018	2017	2018	% change 18/17	2017	2018	% change 18/17
Growth stocks	41	41	1,734.7	1,318.2	-23.4	294.2	157.1	-46.6
SICAV	2,864	2,722	33,702.3	27,720.1	-17.7	4,566.5	3,973.9	-13.0
Hedge funds	14	15	448.7	458.9	2.3	55.5	15.4	-72.2
SOCIMIs	46	64	7,919.0	10,513.4	32.8	69.6	69.9	0.4
Total	2,965	2,842	43,804.8	40,020.7	-8.6	4,985.8	4,216.3	-15.4

Source: CNMV. (1) Includes only the value of those entities for which there was trading during the year.

SOCIMIs have accumulated 4 consecutive years of strong growth supported by specific tax legislation to a total of 64 companies, which confirms the recovery of the real estate market. A total of 19 SOCIMIs entered the Spanish markets in 2018, 18 of which joined the MAB. SOCIMIs are the Spanish adaptation of the real estate investment vehicles (REIT) that exist in other countries²⁸ and are characterised by having a tax treatment which exempts them from paying corporate income tax and allows them to enjoy a 95% credit on transfer tax and stamp duty. In return, they are required to distribute 80% of the profits obtained from rental income and 50% of the gains generated by the sale of assets. Their activities focus on the promotion, refurbishment and transaction of leased real estate, holdings in other SOCIMIs and the performance of ancillary real estate activities. They are also required to have a minimum capital of 5 million euros, through either a monetary or a non-monetary contribution, and be listed on a regulated market or multilateral trading facility such as the MAB. This type of company allows investors to diversify their investment and access a real estate portfolio with greater ease and liquidity than in the case of direct investment in real estate assets.

The number of companies listed in the growth stock segment remained unchanged at 41 because, although 3 companies joined the market – Robot, Tier1 Technology and Alquiber —another 3 were delisted — Gowex, Vousse Corp and Carbures. This last company merged with Inypsa to create a new company named Airtificial, which is listed on the electronic market. The amount traded fell by nearly 47% to 157 million euros, while capitalisation fell by almost 23% to under 1.32 billion euros, its lowest level since 2013, which is largely explained by the delisting of the company Carbures. In addition, the companies listed in this segment conducted 11 capital increases²⁹ for an aggregate amount of 115 million euros, 26 million more than in the previous year.

Lastly, the number of SICAVs fell again in 2018, with 142 delistings to stand at a total number of 2,722, with capitalisation that fell to almost 6 billion euros. This fall in the capitalisation of SICAVs can be explained both by the delisting of companies and by the unfavourable market trend in 2018.

At the end of 2016, BME and the investor association Big Ban Angels created a joint initiative called Pre-Market Environment (EpM) so as to allow companies with great growth potential to discover the functioning of stock markets and access new investors. The project currently has 13 companies in the start-ups segment, belonging to 11 different sectors of activity, that obtain aggregate revenue of 70 million euros and represent a committed private investment of 25 million euros. In addition, for more mature companies, a growth segment has been created with specific development programmes that will facilitate their access to the MAB.

2.1.7 Exchange-Traded Funds (ETFs)

The trading of Exchange-Traded Funds (ETFs) began on the Spanish market in 2006 and reached a figure of close to 70 in 2011. However, this form of trading has dropped off and had almost disappeared by 2018. Although they are a simple and transparent product with low management costs, which allow, due to their

²⁸ Law 11/2009, 26 October, regulating SOCIMIs.

²⁹ Source: BME.

flexibility, investors to diversify positions by type of asset, market, sector, geographic area and even strategy, their expansion in the Spanish market has been penalised by their different tax treatment compared with traditional (non-listed) investment funds. In addition, ETFs listed on the Spanish stock exchange have also been penalised in comparison with those distributed in Spain and listed on international markets, to which the tax deferral of gains could be applied. In this regard, the position of the CNMV has always been to standardise tax treatment so as to eliminate the competitive edge of the relatively high tax penalties for those listed on the Spanish market compared with those listed abroad. As a consequence of these factors, ETFs listed on Spanish markets have lost a great deal of the interest of both issuers and fund managers present in the Spanish stock market, which have decided to delist their less liquid issues to the benefit of ETFs listed on other markets.

At year-end 2018, a draft bill was being processed to standardise the tax treatment of ETFs irrespective of the market on which they are listed so as to extend the same tax system that existed for ETFs listed in Spain to ETFs listed abroad and distributed in Spain.

In this context, trading volumes of these products fell for the third consecutive year to 3.03 billion euros, 32% down on 2017 and the lowest volume since 2013, while assets managed fell to 1.17 billion euros at year-end 2018, a fall of 37%. Trading became even more concentrated in a small number of funds (those referenced to the Ibex 35 accounted for over 95% of the total trading volume), of which one single fund accounts for over half. At year-end, six ETFs were traded on Spanish stock markets managed by two financial institutions (in 2015, over 55 different ETFs were traded), two fewer than in 2017. Entities have continued to delist the less liquid issues and one German entity abandoned this activity. Of the six issues currently traded, four correspond to a French entity and two to a Spanish entity, whose references are linked to the performance of the Ibex 35 and Eurostoxx 50 stock market indices.

Half of the funds traded follow passive management strategies based on tracking the above indices, while the others are inverse and leveraged funds linked to the Spanish index, which concentrate almost one third of the amount traded in the segment.

At any event, it is worth pointing out the anomaly in the Spanish market of the low investment in this type of product which amount to an investment in the rest of Europe of approximately 630 billion euros.

2.2 Fixed income

During 2018, activity in the primary fixed-income markets by Spanish issuers was underpinned by a context of low interest rates, but there were also other factors pushing in the opposite direction, such as changes in borrowing needs over the year and the existence of alternative sources of financing. As a whole, both aggregate gross and net issues were lower than in 2017, although they resulted in a 2% increase in the outstanding debt balance (very similar to that of the euro area, although with significant differences between sectors).

Total gross issues fell by close to 5% in 2018 as a result of both fewer issues by public authorities – in parallel with the reduction in borrowing needs as a result of the

gradual reduction in the public deficit – and the fall in issues by financial institutions, which continued to find the financing offered by the Eurosystem a more attractive alternative. In contrast, debt issues by non-financial companies increased significantly as low interest rates and the expectation that they would be raised in the short term encouraged these companies to obtain financing in capital markets.

In 2018, Spanish issuers continued registering fewer private fixed-income issues with the CNMV and increasing their issues abroad. These issues abroad reached an amount that was close to the 90% of the total volume registered with the CNMV, with a substantial increase in commercial paper, which exceeded 50 billion. Also noteworthy was the increase in fixed-income issues abroad by the subsidiaries of Spanish companies and, within these, those made by financial institutions. These are foreign subsidiaries of Spanish companies and therefore their issues do not count as Spanish private fixed income, but they may be an alternative source of financing for the Spanish parent companies.

In 2018, debt assets were traded in a new context resulting from the entry into force of MiFID II and MiFIR on 3 January, which introduced greater competition by allowing these assets to be traded on regulated markets, Multilateral Trading Facilities (MTFs), Organised Trading Facilities (OTFs) and Systematic Internalisers (SIs). From the point of view of Spanish trading venues, it is worth noting the fall in private debt trading on the AIAF regulated market, which is the result of increased competition among trading venues and a change in the channelling of bilateral trades, which are now also performed through SIs or considered as OTC trades. With regard to Spanish OTFs, it is important to note that two facilities began operating: CIMD and CAPI.

2.2.1 General overview

While the ECB maintained its expansive monetary policy stance in 2018, at the end of the year it began to reduce the volume of net asset purchases as a first step in the scheduled shift in its policy stance. Net asset purchases fell from 30 billion euros per month in October to 15 billion in December 2018, the month in which the end of the purchase programme was confirmed. However, the ECB announced that it would maintain a sufficiently accommodative monetary policy stance throughout 2019, and reinvest the principal payments from maturing securities purchased under the programme. With regard to the planned interest rate hikes, for much of 2018 the ECB favoured making the first rate rise at the end of the summer of 2019. However, the sharp slowdown in growth in the euro area, which began to become evident at the end of 2018, once again delayed the date of this first rate hike, which is unlikely to take place at all in 2019.

The confirmation that the change in the trend of the ECB's monetary policy would be slow and gradual led to interest rates, both of public debt and private fixed income, to close 2018 at similar levels to those of 2017 and close to their historic lows.

In 2018, both volumes of gross and net fixed-income issues fell compared with 2017, during which they had grown substantially. However, net issues remained positive, which contributed to a moderate increase in outstanding debt. In 2018, Spanish issuers placed fixed-income securities in the primary market for an amount of 416.66 billion euros, which exceeded the maturities by 31.37 billion euros. This led to a 2% increase in outstanding securities, which is in line with that recorded in the

euro area (2.1%). However, while in the euro area financial institutions were the main contributors to this increase, in Spain their net issues were negative (-14.43 billion euros). The increase in the outstanding balance of fixed-income instruments was mainly concentrated in public authorities, with net issues of 37.93 billion euros. Non-financial companies also contributed to the increase in the outstanding balance, although with a much more moderate volume, with net issues of 7.87 billion euros.

The lower level of issues by Spanish financial institutions in 2018 contrasted with the behaviour of these institutions in the rest of the euro area, where their issues led to an increase in the outstanding debt balance of 2.8% (-2.3% in the case of Spanish financial institutions). One of the reasons for this difference might be the intensive use by Spanish credit institutions of the low-rate financing facilities offered by the ECB. At year-end 2018, the balance of lending granted by the Eurosystem to Spanish credit institutions amounted to 167.42 billion euros, accounting for 23% of all Eurosystem lending and a share that almost triples the share that the Bank of Spain holds in the ECB's capital (8.34%). It may therefore be deduced that Spanish institutions make use of this type of financing to a greater proportion than other European institutions. This fact, together with the moderate fall in lending and the reduction in the problematic assets of Spanish banks might explain them having less need to obtain financing from the debt market.

Issues and outstanding balances: breakdown by issuer

TABLE 2.2.1

Million euros

	Amount ¹			Pro memoria: euro area	
	2017	2018	% change 18/17	2018	% change 18/17
Gross issues²	437,872	416,664	-4.8	7,275,245	-1.4
Public authorities	241,868	219,420	-9.3	2,308,559	-3.7
Financial institutions	180,229	176,356	-2.1	4,298,833	-0.9
Non-financial companies	15,774	20,888	32.4	667,854	3.6
Net issues²	37,187	31,373	-15.6	274,415	32.1
Public authorities	46,903	37,929	-19.1	111,599	-31.9
Financial institutions	-18,032	-14,428	20.0	120,374	535.4
Non-financial companies	8,315	7,873	-5.3	42,442	-40.7
Outstanding balances^{3, 4}	1,678,646	1,712,005	2.0	16,947,261	2.1
Public authorities	989,023	1,026,951	3.8	8,117,355	1.4
Financial institutions	653,103	637,848	-2.3	7,546,161	2.8
Non-financial companies	36,521	47,206	29.3	1,283,745	2.3

Source: Bank of Spain, CNMV and ECB. The data for the debt of public authorities in this table are not directly comparable with the data drawn up according to the Excessive Deficit Protocol, mainly due to the fact that the latter methodology excludes securities held in the portfolios of public authorities and includes currency swaps. (1) Includes issues by Spanish companies in Spain and abroad. (2) For currency issues of public authorities, the exchange value in euros is used by applying the average exchange rate for the month published by the ECB. For currency issues of financial institutions and non-financial companies, the exchange value in euros is used by applying the exchange rate for the last day of the month published by the ECB. (3) For the outstanding balances of currency issues, the exchange value in euros is used by applying the exchange rate of the ECB at the end of the period. (4) Outstanding balances cannot be adjusted with net issues because of the use of different exchange rates for currency issues.

There was also a notable increase in gross issues by subsidiaries of Spanish financial institutions abroad, the volume of which doubled in 2018, rising from 19.46 billion euros to 41.97 billion euros. To a certain extent, the financing obtained abroad by the subsidiaries might be an alternative source of financing for the group's Spanish parent company.

2.2.2 Public debt

The movements in government bond yields in 2018 were the result of decisions and expectations relating to the ECB's monetary policy, upgrades in the credit ratings given by the leading rating agencies and the presence of some uncertainties. Movements in the first few months of the year were largely the result of the effect of the improvement in the credit rating given to the Kingdom of Spain by the four rating agencies considered by the Eurosystem, which resulted in a slight fall in the risk premium and the yield on government bonds. In contrast, in the second half of the year, uncertainty relating to Italian public finances and the possibility that the accommodative monetary policy would be reversed faster than expected led to certain temporary upturns in yields. Finally, the narrowing of the differences between the positions of the Italian government and the European Union with regard to Italian public accounts and the confirmation by the ECB that its monetary policy would remain accommodative at least until the second half of 2019³⁰ led to government bond yields at most maturities and the sovereign credit risk premium to close the year at similar levels to those of 2017.

In this context, short-term government bond yields remained in negative terrain for the fourth consecutive year and closed 2018 at levels close to historic lows. Consequently, the yield in the secondary market of 3-month, 6-month and 12-month treasury bills at the end of December (on average) stood at -0.50%, -0.41% and -0.33%, respectively. These values are in line with the minimum annual yield of -0.40% established by the ECB in its debt purchase programme (deposit facility rate). With regard to the longer terms, the yield on 3-year, 5-year and 10-year government bonds in December (on average) stood at -0.04%, 0.43% and 1.43%, respectively. These values are very close to those recorded at the end of 2017, with a slight increase in 5-year yields (12 bp), while 10-year yields closed the year at almost exactly the same level as year-end 2017 (see Table 2.2.2).

30 In mid-December, the ECB's president reiterated the bank's commitment to maintaining rates at current levels (0%) at least through the summer of 2019, and in any case for as long as necessary. By the end of December 2018, the ECB had acquired public debt for 2.17 trillion euros, of which 260.82 billion euros corresponded to Spanish debt.

Interest rates for public debt¹

TABLE 2.2.2

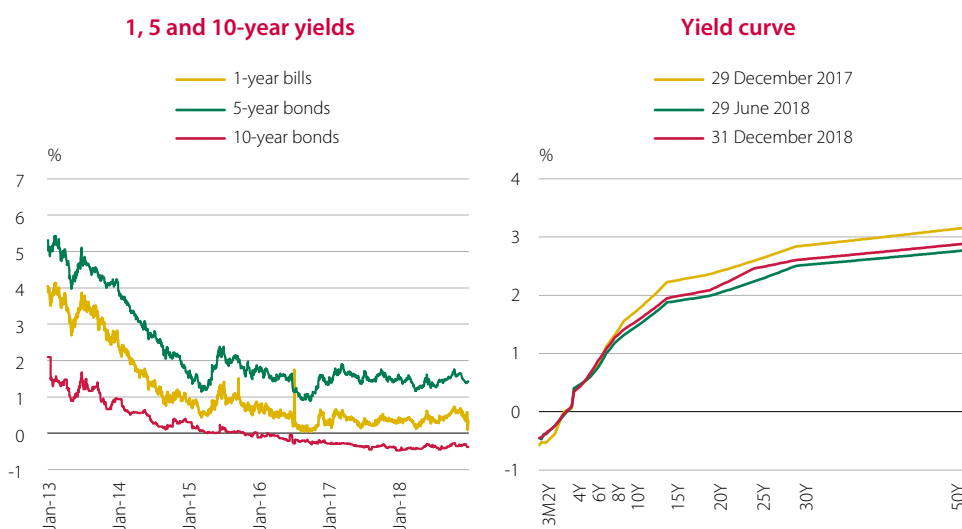
%	Dec-15	Dec-16	Dec-17	Dec-18
Treasury bills				
3 months	-0.15	-0.47	-0.62	-0.50
6 months	-0.01	-0.34	-0.45	-0.41
12 months	-0.02	-0.25	-0.42	-0.33
Medium and long-term government bonds				
3 years	0.24	0.04	-0.09	-0.04
5 years	0.72	0.35	0.31	0.43
10 years	1.73	1.44	1.46	1.43

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

The yield curve of Spanish government bonds at year-end 2018 was practically identical to that of year-end 2017 up to maturities of 8-10 years. However, at longer maturities, yields at 31 December 2018 were slightly below those of year-end 2017.

Spanish government debt yields

FIGURE 2.2.1



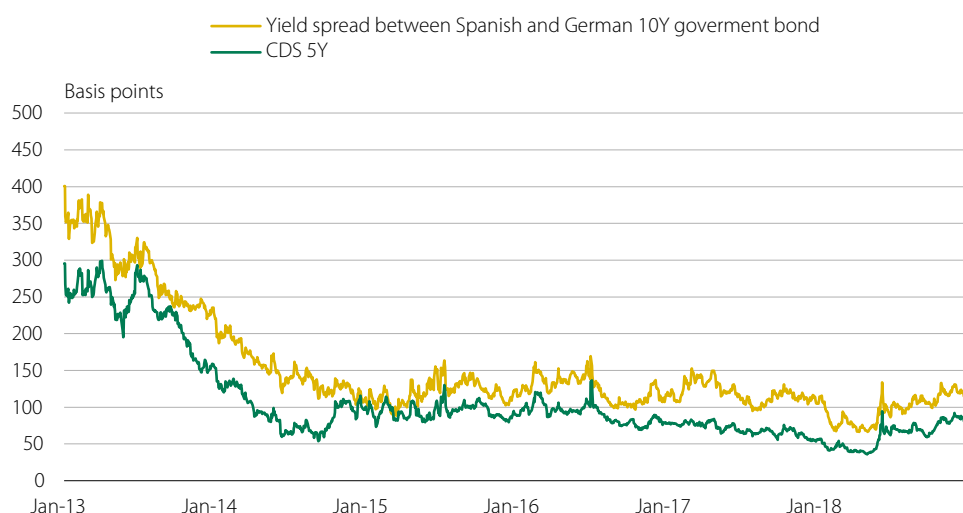
Source: Thomson Datastream and Bloomberg.

The risk premium, measured as the spread between the yields on the Spanish 10-year sovereign bond and the 10-year German bond, stood at 118 bp at the end of 2018, a figure similar to that recorded at the end of 2017 (114 bp), but in the higher part of the range between the annual high of the end of May (134 bp) and the low recorded in April (66 bp). The risk premium measured by using the CDS of the Spanish sovereign bond – whose market is less liquid than that of the German bond – recorded more significant increases and stood at 80 bp at the end of 2018, compared with 57 bp at the end of 2017 (see Figure 2.2.2).

Risk premium paid by Spanish issuers: public sector

FIGURE 2.2.2

Securities markets
and their agents
Markets and issuers



Source: Thomson Datastream and CNMV.

2.2.2.1 Primary market

The volume of gross issues registered by the public authorities in 2018 stood at 219.42 billion euros, 9.3% below the figure for the previous year. The breakdown by type of issuer shows that Central Government was responsible for 98.3% of all issues (215.7 billion euros), while the amount issued by the regional governments (3.72 billion euros) accounted for a very low percentage of the total (1.7%). The State provides financing to both autonomous regions and local authorities through various mechanisms, such as the Fund for Financing of the Autonomous Regions and the Fund for the Financing of Local Authorities, which explains their extremely low need to obtain financing directly from the markets.

Gross issues by public authorities

TABLE 2.2.3

Nominal amount in million euros

	2015	2016	2017	2018	% change 18/17
State	240,594	223,067	236,506	215,702	-8.8
Short-term	97,871	100,996	94,439	80,984	-14.2
Long-term	142,723	122,071	142,067	134,717	-5.2
Regional governments	4,046	4,866	5,305	3,718	-29.9
Short-term	424	482	532	458	-13.8
Long-term	3,621	4,384	4,774	3,260	-31.7
Local authorities	0	0	56	0	-100.0
Short-term	0	0	0	0	-
Long-term	0	0	56	0	-
Total public authorities	244,639	227,933	241,868	219,420	-9.3

Source: Bank of Spain and CNMV.

Total net issuance by the public authorities in 2018 amounted to 37.93 billion euros, 19.1% down on the net volume in 2017, a year in which they had increased significantly. Despite the fall, it contributed towards a 3.8% increase in the balance of outstanding debt. Net issues by Central Government stood at 41.68 billion euros, while net issues by regional governments and local authorities were negative (-3.62 billion euros and -134 million euros, respectively), as the redeemed volume was higher than the issued volume.

Long-term issues by Central Government amounted to 50.08 billion euros, while in shorter-term debt, redemptions were 8.44 billion euros higher than issues. This made it possible once again to increase the average life of outstanding debt, which stood at a historic high of 7.45 years at the end of 2018. The aim of extending the average life is to take advantage of the current context of interest rates at historic lows to reduce the refinancing risk of the debt and the level of vulnerability relating to the financial burden in the event of a period of interest rate hikes.

2.2.2.2 Secondary market

As a result of the changes introduced by incorporation into Spanish law of the new European legislation on securities markets (MiFID II and MiFIR), which entered into force on 3 January 2018, new issues by the Spanish Treasury are registered and admitted to trading on the AIAF fixed-income market. These changes led to the suspension, on 16 April 2018, of publication of the Bank of Spain's *Public Debt Market Bulletin*.

Spanish public debt is traded on AIAF (regulated market), on SENAF (multilateral trading system), on CAPI OTF and on CIMD OTF (two Spanish organised trading facilities). SENAF (the Electronic System for Trading Financial Assets) is a multilateral trading facility for Spanish sovereign debt run by Bolsas y Mercados Españoles Renta Fija (BME RF), aimed at market creators in order to meet their liquidity commitments.

AIAF is a regulated fixed-income market perfectly adapted to MiFID II legislation, which extended its scope of action in 2018 to admit to trading sovereign debt issues from other countries, such as Germany, France, the Netherlands, Belgium, Austria, Portugal and Ireland and those under the European Stability Mechanism (ESM).

In 2018, the public debt traded in AIAF platform rose by almost 500 times, so that it grew from an insignificant figure in 2017 – 120 million euros in government bonds and 4 million euros in treasury bills – to 56.12 billion euros and 24.77 billion euros in bonds and bills, respectively, in 2018. One of the reasons that explains its rise, as mentioned previously, lies in the fact that it is adapted to the MiFID II legislation, meeting the pre-and post-trading transparency obligations imposed under this new legislation. For its part, public debt traded on SENAF was somewhat lower than that of AIAF in 2018.

In relation to the two Spanish organised trading facilities – CAPI OTF and CIMD OTF – authorised by the CNMV in January 2018, it should be pointed out that the volume of Spanish public and private debt traded in 2018 stood at 92 billion euros in the case of CAPI OTF (35.3 billion in foreign debt) and 257.66 billion euros in the case of CIMD OTF (52.25 billion in foreign debt). Debt and derivative financial instruments can be traded on these facilities (see Section 2.3.3).

Total trading of fixed-income instruments in Spanish trading venues. 2018 TABLE 2.2.4

Venue	Type of debt	Nominal amount (million euros)
AIAF		
	Corporate	429
	Sovereign	
	Spanish	80,899
	Foreign	12,913
SENAF		
	Sovereign	70,918
MARF		
	Corporate	8
OTF¹		
CAPI	Corporate and sovereign	
	Spanish	92,000
	Foreign	35,301
CIMD	Corporate and sovereign	
	Spanish	257,662
	Foreign	52,252

Source: CNMV. (1) Sovereign debt (the majority) is not distinguished from corporate debt.

As regards the trading of Spanish public debt on other foreign trading venues, noteworthy is MTS Spain, a public debt trading platform that forms part of MTS Markets, an entity of the London Stock Exchange group, which is authorised as a multi-lateral trading facility by the FCA. The volume of trading of Spanish government bonds on this platform fell by 17.4% in 2018 (28.59 billion euros), representing 1% of the total, while trading of treasury bills fell by 62% (117.42 billion), representing 6.4% of all trading of these instruments.

As shown in Table 2.2.5, the bulk of public debt trading was registered in the section of other platforms and OTC. This heading includes both volumes traded through different MTFs of the three market operators reflected in the Table (SENAF, MTS and EuroMTS), as well as the amount traded through other OTFs, SIs and OTC trades.

The volume of government bonds traded on other platforms and OTC trades rose significantly in 2018, which was much greater in the case of government bonds. This rise in the trading of government bonds on the secondary market would be in line with that seen in the primary market, in which net issues of bonds were positive, while net issues of treasury bills were negative. It might also have been influenced by other factors, such as the evolution of both types of asset, or purely statistical effects.³¹

31 Until 2017, trading data came from the Bank of Spain, while in 2018 the data are obtained from the General Secretariat of the Treasury, using data from Iberclear on the settlement of both own-account transactions and transactions on behalf of third parties, and therefore the statistics may not be fully comparable.

Public debt trading by trading platform

TABLE 2.2.5

Million euros

	2015	2016	2017	2018	% change 18/17
Unstripped bonds					
SENAF	15,039	14,580	37,818	26,242	-30.6
AIAF/SEND	233	112	120	56,121	46,738.8
MTS Spain	136,430	164,814	164,722	136,132	-17.4
EuroMTS	18,807	11,648	6,051	7,083	17.1
Other platforms and OTC	10,143,946	8,047,692	9,080,255	13,880,941	52.9
Total	10,314,455	8,238,845	9,288,965	14,106,518	51.9
Treasury bills					
SENAF	48,121	100,883	70,905	44,676	-37.0
AIAF/SEND	30	8	4	24,767	596,114.3
MTS Spain	146,458	247,257	189,080	136,828	-27.6
EuroMTS	8,641	6,604	2,903	1,294	-55.4
Other platforms and OTC	1,702,494	1,710,623	1,504,502	1,975,475	31.3
Total	1,905,744	2,065,376	1,767,394	2,183,040	23.2

Source: General Secretariat of the Treasury and International Financing and BME RF.

2.2.3 Private fixed income

In parallel with the case of public debt, the yield on short-term private fixed-income assets closed the year at all-time lows and slightly lower than at the end of 2017. In December, the yields on commercial paper when issued stood at values ranging between 0.07% for the 12-month benchmark and 0.24% for the 3-month benchmark. The fact that the average yield on shorter-term commercial paper is higher than that of longer-term commercial paper is due to the low number of instruments considered in the average and the higher credit quality of the issuers that issue long-term commercial paper.

Yields on private fixed income¹

TABLE 2.2.6

%	Dec-15	Dec-16	Dec-17	Dec-18
Short term (commercial paper)²				
3 months	0.31	0.18	0.39	0.24
6 months	0.42	0.20	0.26	0.19
12 months	0.53	0.15	0.19	0.07
Medium and long-term				
3 years	0.66	0.69	0.44	0.67
5 years	1.95	1.43	0.41	0.55
10 years	2.40	2.14	1.16	1.52

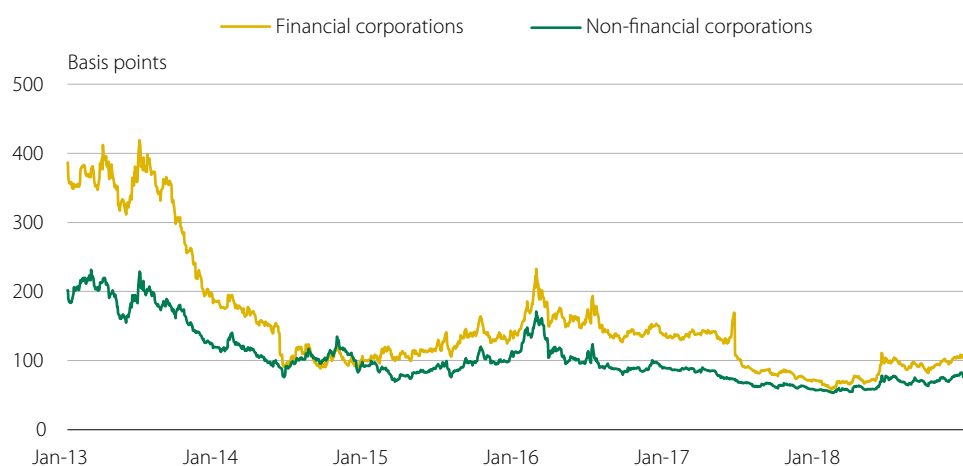
Source: Thomson Datastream and CNMV. (1) Monthly average of daily data. (2) Interest rate at issuance.

The yields on longer-term corporate bonds were affected by the negative impact of the termination of the ECB's corporate sector purchase programme,³² as well as the increase in the corporate bond risk premium. Both factors, together with the perspective that the slowdown in economic growth would affect the growth rates of corporate earnings in a context of expected rate hikes in the medium term, led corporate bond yields to rise slightly across most maturities on the curve. In the first three quarters of 2018, long-term corporate bonds recorded a negative spread with respect to government bonds thanks to the positive effect of the purchase programme for these assets, both in primary and secondary markets. However, the termination of the programme reversed the trend at the end of the year and the yields once again moved above those of government bonds across all maturities on the curve. At year-end 2018, yields on 3-, 5- and 10-year corporate bonds stood at 0.67%, 0.55% and 1.52%, respectively, which implies a spread with regard to government bonds of 71 bp, 12 bp and 9 bp, respectively, and a certain increase on the level of these yields at year-end 2017.

The credit risk premiums of Spanish issuers obtained from 5-year CDS followed a slight upward trend in 2018, which was more intense in the case of financial institutions as they are more exposed to some of the sources of uncertainty present in 2018 (exposure to Italian debt assets, emerging economies in difficulties, regulatory and tax uncertainties, etc.). At the end of the year, the average risk premium of financial institutions stood at 108 bp (70 bp in 2017), while those of non-financial companies stood at 78 bp (58 bp in 2017).

Risk premium paid by Spanish issuers: private sector¹

FIGURE 2.2.3



Source: Thomson Datastream and CNMV. (1) Simple average of the 5-year CDS of a sample of issuers.

2.2.3.1 Primary market

Debt issues registered with the CNMV in 2018 followed the downward trend of recent years and recorded the lowest volume of the decade, standing at 101.3 billion euros, 7.5% down on 2017. Issues of most debt assets, both long and short term, fell. Increases were recorded in issues of long-term bonds, with a volume of 35.84 billion

32 The corporate sector purchase programme had purchased a cumulative volume of 178.19 billion euros up to mid-February 2019, of which around 10% corresponded to Spanish issuers.

euros, of which 29.75 billion euros were issued by the SAREB.³³ Debt issued by the SAREB, which accounted for 83% of total long-term bonds and almost one third of total private fixed-income issues registered with the CNMV, is not placed in the market, but is fully subscribed by its shareholders.

With regard to the other categories, issues of asset-backed securities fell by 38% to 18.15 billion euros. This reduction is mainly the result of the sharp fall in issues of mortgage-backed securities, which fell from 14.89 billion euros to 683 million euros, which could not be offset by the increase in securitisations of loans to SMEs (from 3.75 billion euros to 10.44 billion euros).

As in recent years, the amount of securitisation bonds subscribed by the issuer or assignor of the receivables was very high – 71.8% compared with 82% in the previous year. Since the start of the financial crisis, financial institutions have used this way of issuing debt in order to provide these assets as collateral to the ECB and obtain funding from the Eurosystem. The other securitisation issues, i.e., those that effectively went to the market, were mainly securitisation bonds of debt issued to finance the electricity deficit (2.68 billion euros) and car loans. Annexes I.17 and I.18 provide greater detail about securitisation bond issues registered with the CNMV.

Gross issues registered at the CNMV: breakdown by instrument

TABLE 2.2.7

Nominal amount in million euros

	2014	2015	2016	2017	2018
Long-term	96,604	109,298	116,068	91,576	85,987
Non-convertible bonds and debentures	41,155	39,100	40,170	30,006	35,836
Subordinated debt	1,000	500	512	1,550	500
Convertible bonds and debentures	750	53	0	0	0
Mortgage bonds	23,838	31,375	31,643	29,824	26,575
Territorial bonds	1,853	10,400	7,250	350	2,800
Asset-Backed Securities (ABS)	29,008	28,370	35,505	29,415	18,145
Mortgages	17,310	9,458	19,621	14,885	683
Companies (SMEs)	8,750	14,124	7,500	4,850	10,442
Other	2,948	4,788	8,384	9,680	7,020
Preferred shares	0	0	0	1,000	2,850
Other issues	0	0	1,500	981	0
Short term²	33,654	27,310	22,960	17,911	15,089
Commercial paper	33,654	27,310	22,960	17,911	15,089
Asset-backed	620	2,420	1,880	1,800	240
Total	130,258	136,607	139,028	109,487	101,295

Source: CNMV. (1) Issued by mortgage securitisation funds. (2) The figures for commercial paper issues correspond to the amounts placed.

The volume of commercial paper issues registered with the CNMV and admitted to trading on AIAF also fell in 2018, thus prolonging the downward trend of recent years. These issues stood at 15.09 billion euros, a fall of 16% on the figure recorded in 2017. In parallel, there was a significant increase in issues of commercial paper abroad by Spanish issuers. In 2018, these issues amounted to 50.93 billion euros, much more than double the figure recorded in the previous year. The leading Spanish issuer abroad was the Official Credit Institute (Spanish acronym: ICO), with a total issued amount of 22.38 billion euros, accounting for 44% of the commercial paper issued abroad.

In parallel with the increase in commercial paper issues abroad, there was a significant fall in issues of long-term bonds, with the volume issued abroad falling by 31.5% on the previous year (from 49.88 billion euros to 34.18 billion euros).

The volume of issues by the subsidiaries of Spanish companies abroad rose by 39% to 90.18 billion euros. Particularly noteworthy was the increase in issues by financial institutions, which more than doubled in amount in 2018, rising from 19.46 billion euros to 41.97 billion euros.

Gross private fixed income issued by Spanish issuers in foreign markets TABLE 2.2.8

Nominal amount in million euros

	2014	2015	2016	2017	2018
Long-term	35,281	33,362	31,655	61,125	38,425
Preferred shares	5,602	2,250	1,200	5,844	2,000
Subordinated debt	3,000	2,918	2,333	5,399	2,250
Bonds and debentures	26,679	28,194	28,122	49,882	34,175
Securitisation bonds	0	0	0	0	0
Short-term	21,441	32,984	26,932	23,646	50,933
Commercial paper	21,441	32,984	26,932	23,646	50,933
Asset-backed	0	0	0	0	0
Total	56,722	66,347	58,587	84,771	89,358
Pro memoria: Gross issues of subsidiaries of Spanish companies resident abroad					
Financial institutions	10,201	14,875	11,427	19,459	41,966
Non-financial companies	31,969	40,411	45,247	45,361	48,212
Total	42,170	55,286	56,674	64,820	90,178

Source: Bank of Spain.

There was a noteworthy increase recorded by the MAREF. Designed in 2013 as an MTF, it incorporates into fixed-income markets issues by smaller companies, many of which were not present in capital markets. This market has grown continuously since its creation, with a sharp rise in commercial paper admitted to trading in 2018. The nominal amount placed grew by 60% on 2017 and stood at 5.76 billion euros, accounting for over one third of the volume of new issues of commercial paper admitted to trading on AIAF in 2018.

Admission to MARF

TABLE 2.2.9

Nominal amount in million euros

	2015	2016	2017	2018
Non-convertible bonds and debentures	355.5	398.6	75.8	365.0
Securitisation bonds	0.0	1,782.5	242.5	234.1
Commercial paper	431.7	23.5	3,651.6	5,759.6
Total	787.2	2,204.6	3,969.9	6,358.7

Source: CNMV.

2.2.3.2 Secondary market

As with the trading of public debt, the information relating to the trading of private fixed-income instruments has been affected by the entry into force of MiFID II on 3 January 2018. The objectives of this Directive include attracting more trading towards multilateral trading environments subject to organised and transparent trading rules, to the detriment of bilateral OTC trading. Multilateral facilities operate according to three possibilities: regulated markets, MTFs and OTFs. Bilateral trading can be channelled through SIs or be strictly OTC.

This new legislative framework has encouraged increased competition between the different facilities and trading venues, which seems to have negatively affected activity on AIAF, the Spanish regulated market. Trading of private fixed-income instruments on this market fell from 66.78 billion euros in 2017 to 429 million in 2018, as a consequence not only of this increased competition, but also the change in the channelling of bilateral trading, which, as mentioned above, is currently performed through SIs on a strictly OTC basis (AIAF is no longer involved). As mentioned previously, the CNMV authorised two Spanish OTFs in January 2018 (CAPI OTF and CIMD OTF), on which private fixed-income instruments began to be traded (see Table 2.2.4).

It should be noted that the trading of private debt assets on Spanish trading venues accounts for a small proportion of the total trading of these assets. Some preliminary estimates suggest that the most significant trading continues to be OTC (with an approximate relative share of 45% of total trading), followed by that performed on the Bloomberg Multilateral Trading Facility. This MTF is based in the United Kingdom and would have been the MTF that concentrated the largest trading volume in 2018 (a little over 30% of total). Two other MTFs (Tradeweb and MarketAxees), also domiciled in the United Kingdom, together would have performed a little over 10% of private fixed-income trading.

Total trading of private fixed-income instruments issued by Spanish companies.¹ 2018

TABLE 2.2.10

Securities markets
and their agents
Markets and issuers

Million euros

	2018
Bilateral trading (OTC)	93,198
Bloomberg (MTF)	64,418
Tradeweb (MTF)	17,804
MarketAxees (MTF)	5,716
Other MTFs and SIs ²	26,238
Total	207,374

Source: CNMV. (1) Data estimated from information contained in TREM (Transaction Reporting Exchange Mechanism). (2) This heading includes the sum of the volumes traded on multilateral trading facilities other than those indicated above, whether regulated markets (including AIAF in Spain), other multilateral trading facilities (including MARF), organised trading facilities (including CAPI OTF and CIMD OTF, registered in Spain) and other systematic internalisers (Banco Santander and BBVA are SIs authorised in Spain).

2.3 Derivatives markets

The activity of Spanish organised derivatives markets (the MEFF Exchange, where financial derivatives and electrical power contracts are traded) fell slightly, which contrasted with the growth of these markets worldwide. In addition, the first two OTFs where derivatives are traded were created. These are a new type of trading venue introduced by MiFID II. In addition, as in recent years, both the trading of warrants on the secondary stock market and the volume of those issued in the primary market continued to fall compared with previous years.

The volume of derivative contracts traded on international financial markets recorded a new all-time in 2018, with a total of 30.28 billion contracts traded (20.2% up, the highest growth rate since 2010). This growth was spread over the two segments existing in the market, which in both cases set a new record, with 17.15 billion contracts (15.6%) for futures and 13.13 billion contracts for options (26.8%).

By geographic area, there was an increase in trading in all the major regions, with significant growth in the number of contracts recorded in the Asia-Pacific (27.1%) and Latin American (40.8%) regions, although Asia-Pacific and North America are still the regions with the highest market shares (37% and 34.9%, respectively). Trading in Europe grew by 6.7% up to an all-time high of 5.27 billion contracts (of which, 4.17 billion corresponded to futures and 1.1 billion to options), accounting for 17.4% of the global market. Particularly important among the European markets due to their size are the Eurex and ICE Futures Europe markets, which recorded the highest contract volumes and growth rates.

Trading on European financial derivatives markets

TABLE 2.3.1

Thousands of contracts

	2016	2017	2018	% change 18/17
Eurex	1,727,460	1,675,898	1,951,763	16.5
ICE Futures Europe	973,858	1,166,947	1,276,090	9.4
Euronext	126,241	140,276	149,254	6.4
Nasdaq Exchange Nordic Markets	91,077	86,420	87,272	1.0
London Stock Exchange Group	54,065	42,538	46,105	8.6
MEFF	40,205	39,246	38,396	-2.2

Source: Eurex, Futures Industry Association, Intercontinental Exchange and CNMV.

2.3.1 MEFF Exchange

Financial derivatives

Trading of derivative contracts on the MEFF fell by 2.2% in 2018 on the previous year as the growing activity in contracts on indices (1%) was not enough to offset the decline in derivative contracts on shares (-2.9%). Also, despite this market having a futures contract on the Spanish 10-year sovereign bond, there was no recorded activity – as had been the case in 2017 – due to competition from a similar contract on the German Eurex market.³⁴

In the segment of Ibex 35 financial derivatives, the most traded contracts were Ibex 35 futures, which grew by 1.3% due to the increase in the larger Plus contracts (1.2%) and, to a lesser extent, in Ibex 35 dividend impact contracts (63.1%). In contrast, the smaller-sized Mini contracts fell (-7.9%) as did contracts on banks and energy sector indices (-64.6%), which remain concentrated in the banking sector. In addition, Ibex 35 option contracts fell by 2.8%.

Trading of equity derivatives fell by 2.9% in the year due to the fall in the traded volume of stock futures contracts (-8.3%), while the number of stock option contracts remained practically the same (-0.4%). In addition, as in previous years, trading was concentrated in a small number of underlying assets (Banco de Santander, BBVA, Telefónica, Iberdrola and Repsol), that accounted for around 92% of total trading both of futures and options, similar percentages to those recorded in 2017. Banco de Santander stock futures and options alone accounted for 73% and 33% of the total, respectively. Dividend futures grew by 36.1%, with their traded volume reaching an all-time high since their introduction in 2012.

34 On 26 October 2015, Eurex launched its Euro-BOND Futures contract, a future whose underlying asset is the Spanish sovereign 10-year bond. In 2018, 173,450 contracts of this type were traded on this market (Source: Eurex).

Trading on MEFF Exchange¹

TABLE 2.3.2

Securities markets
and their agents
Markets and issuers

Number of contracts

	2015	2016	2017	2018	% change 18/17
Debt contracts	8,012	360	0	0	-
10-year bond future	8,012	360	0	0	-
Ibex 35 contracts	8,279,939	7,468,299	6,911,671	6,983,287	1.0
Ibex 35 futures ²	7,735,524	7,146,060	6,481,301	6,564,971	1.3
Plus	7,384,896	6,836,500	6,268,290	6,342,478	1.2
Mini ²	318,129	249,897	161,886	149,023	-7.9
Dividend impact	32,499	58,044	43,372	70,725	63.1
Sector		1,619	7,753	2,745	-64.6
Ibex 35 options ²	544,416	322,239	430,370	418,315	-2.8
Contracts on shares	31,769,507	32,736,458	32,335,004	31,412,879	-2.9
Stock futures	10,054,830	9,467,294	11,671,215	10,703,1912	-8.3
Dividend futures	292,840	367,785	346,555	471,614	36.1
Dividend futures plus	1,152	760	880	200	-77.3
Stock options	21,420,685	22,900,619	20,316,354	20,237,873	-0.4
Total	40,056,458	40,205,117	39,246,675	38,396,166	-2.2

Source: CNMV. (1) The differences in the nominal value of the different products make it impossible to compare them based on the number of contracts traded. However, the evolution of trading over time in each type of product can be tracked. (2) In the case of the Mini futures and options, the number of contracts traded is calculated by dividing by ten so as to standardise the individual size of the contract with those of the Ibex 35 Plus future (it is taken into account that the multiplier of the index used to calculate the nominal value of the contract is one euro in the first two cases and ten euros in the latter case).

New developments in the financial derivatives segment

The main new development in the financial derivatives sector since the start of the year was the establishment of a new RFQ (request for quote) system. This trading system, which is added to the existing electronic trading system (with orders and pre-arranged trades), allows members to enter requests for quotes to other members on the contracts admitted to trading on MEFF's financial derivatives segment. Requests may be initiated by any participant in the market and recipients are able to enter the corresponding responses, which may be an acceptance (accepting the price proposed by the applicant) or a proposal (in the event that the request was made without a price), without the option to propose a contract other than that referred to in the request to which they are responding.

With regard to products, the main new aspect was the introduction from December of Ibex 35 Micro futures, which are characterised by having the Ibex 35 index as underlying, standard weekly and monthly maturities and a multiplier of 0.1 euros, compared with the 10 euros and 1 euro of the Ibex 35 future and Ibex 35 Mini future, respectively. Approval of this new contract entailed changes to the general conditions and to some market circulars, which were modified in order to include the particular features of this new product.

In addition, as from December the timetable for accepting trades within the pre-arranged trade system in the financial derivatives segment was extended to 7 pm for contracts with short hours (those other than Ibex 35 futures, Ibex 35 Mini futures and Ibex 35 Micro futures), maintaining 8:15 pm as the deadline for accepting pre-arranged trades for contracts during extended hours (Ibex 35 futures, Ibex 35 Mini futures and Ibex 35 Micro futures).

In addition, BME launched a new range of daily indices related to the MEFF options and futures market and the Ibex 35 index. These include a volatility index, a volatility trend index and a set of options strategy indices.

Market members

At year-end 2018, MEFF Exchange had a total of 88 market members, 2 fewer than the previous year. Of these 88, 56 traded in the financial derivatives segment and 36 in the power segment. During the year, the members of the power derivatives segment remained the same while the number of members of the financial derivatives segment fell by 2.

Number of members in MEFF Exchange

TABLE 2.3.3

Segment	Traders	Own account traders	Total entities	Change 18/17
Financial derivatives	43	13	56	-2
Power	7	29	36	0
Total entities¹	46	42	88	-2
Change 2018	-2	0	-2	-

Source: MEFF Exchange and CNMV. (1) The total is lower than the sum of members in each segment due to there being entities participating in more than one segment.

2.3.2 MEFF Power

The total trading volume in this segment fell to 12.3 TWh in 2018, a fall of 31.2% on the previous year. The cash value of the registered contracts amounted to 683 million euros, compared with 854 million euros in 2017, a fall of 20.1%. The decrease in this cash value is lower than that recorded in the energy volume as a result of the year-on-year increase in the prices of Spanish electricity futures, in line with other European electricity markets. This explains the fact that the reduction in the cash value is lower than the absolute value of the recorded decrease in energy volume.

In a context of very low trading volume, the period of greatest activity was the last quarter of the year, with highs in October and November, in contrast with the summer months, in which hardly any activity was recorded, unlike in 2017. The fall in year-on-year activity affected all types of contracts except monthly contracts, which grew by 9.4%, and was particularly sharp in the longer contracts. Quarterly and annual contracts fell by 42.8% and 34.8%, respectively, in year-on-year terms. In addition, there were fewer transactions recorded over the year (1,894, 4.3% down on 2017 and an average of 7.5 trades per day), which were also of a smaller size (15 contracts and 6.5 GWh on average, compared with 17.2 contracts and 9.1 GWh on average in 2017).

The open position at year-end 2018 stood at 5.5 TWh (with closing prices valued at nearly 317 million euros), lower than the 8.0 TWh of the open position at the end of the previous year, then valued at 422 million euros. The underlying volume fell by 31.8% in year-on-year terms, while the valuation of the position was 24.9% lower as a result of the increase in prices.

Despite the overall reduction in the open position in 2018, that relating to annual contracts almost doubled (1.1 to 2.1 TWh), accounting for 37.6% of the total position, compared with 13.2% at the end of 2017. The composition of the terms of the trades changed because, although the overall volume of annual contracts fell, trades with more distant maturity periods started to be made (annual for 2020 and beyond), which had been very rare up to the previous year.

At the end of 2018, this market had a total of 201 participants, 3 more than in 2017.

2.3.3 Organised Trading Facilities (OTFs)

MiFID II Directive introduced a new category of trading venue called Organised Trading Facilities (OTFs), where only fixed-income instruments and derivatives may be traded. In OTFs, unlike on regulated markets and MTFs, trading may be carried out under discretionary rules. Furthermore, under certain circumstances, the OTF operator is allowed to carry out matched principal trading in fixed-income securities and derivative instruments and to trade on its own account in those sovereign debt instruments for which there is no liquid market.

In January 2018, the CNMV authorised the operation of the first two OTFs – CAPI OTF and CIMD OTF. The former operates in financial derivatives and foreign exchange, while the latter operates in two differentiated segments: financial derivatives and electricity derivatives.

Trading on Organised Trading Facilities (OTFs)

TABLE 2.3.4

Financial derivatives segment	No. of trades	Cash amount (million euros)
Financial derivatives ¹	2,250	737,350
FX derivatives ²	1,247	367,268
Total	3,497	1,104,618
Energy derivatives segment	2,041	1,344

Source: CNMV. (1) Correspond to trades with swaps, basis swaps, futures on interest-rate indices and over-night indexed swaps. (2) Correspond to trades with foreign exchange futures.

In their first year of activity, OTFs performed 3,497 trades with financial derivatives and 2,041 with energy derivatives, for a cash amount of 1.1 trillion and 1.34 billion euros (as will be discussed below), respectively. Among the financial derivatives, around two thirds of the transactions and the cash amount traded corresponded to interest-rate derivatives, such as different types of swaps and futures, while the remaining third were transactions with derivatives whose underlying were foreign exchange rates.

Energy derivatives segment

CIMD's energy derivatives segment is where swaps with financial settlement against the daily average of the price of the Spanish (SPEL) and Italian (ITEL) electricity spot markets are traded. These contracts have settlement periods ranging from one day (daily contracts) to one year (annual or calendar), in addition to contracts of intermediate duration: weekly, monthly and quarterly. The relevant times of the settlement period for calculating the average of the spot price against which the derivative is settled may be all of the times of the period (base load contracts) or only those between 8 am and 10 pm on the days from Monday to Friday included in the settlement period (peak load contract). In the energy segment of CIMD's OTF, SPEL derivatives in base load and ITEL derivatives in base and peak load are traded.

In the year as a whole, the total trading of these instruments amounted to a volume of 25.1 TWh, 74.6% in SPEL derivatives and 25.4% in ITEL swaps, mostly in base load. The total cash trading volume amounted to 1.34 billion euros, 71.5% in Spanish derivatives and 28.5% in the Italian electricity underlying, a more balanced distribution than in the physical volume as a result of the higher average price of the Italian electricity swaps than those for Spanish electricity.

With regard to the contract settlement periods, particularly noteworthy was the trading of annual contracts of SPEL derivatives, which amounted to 11.5 TWh (61.2% of total trading of "Spanish" derivatives), while trading was more evenly spread for Italian contracts as the annual contracts accounted for 42.8% of total volume, with more small trades in contracts with a settlement period of less than one month.

2.3.4 Warrants and certificates

In 2018, both the number of warrants issued and the volume issued continued to fall, while their trading on the secondary market remained practically unchanged compared with the previous year. This took place in a scenario of low market volatility, which discourages the use of this type of instrument. In the case of certificates, the primary market once again recorded no activity (there have been no issues since 2010), while activity on the secondary market continued to shrink, with a fall of 11.5% in the amount of the premiums traded down to their lowest ever level.

Issues

5,231 warrants were issued in 2018, an 8.7% drop on 2017 and the lowest figure since 2006. The number of issuers decreased to 5, all of which are banks, with the de-registration corresponding to an engineering company that issued warrants in the previous year as part of its restructuring process. The total amount of premiums was 2.09 billion euros, 14.3% less than in 2017, the majority being contracts whose underlying assets were shares and indices, although indices lost relative weight to the benefit of other underlying. In aggregate terms, the total amount of issues was the lowest in recent years, with significant falls of almost 20% in the premiums of index issues. In contrast, despite their low volume, there were significant issues of currencies and commodities, whose premiums grew by 50.4% and 204.1%, respectively. Meanwhile, as mentioned previously, no issue of certificates was registered with the CNMV.

Warrant issues registered with the CNMV

TABLE 2.3.5

Securities markets
and their agents
Markets and issuers

Thousand euros

	Number		Amount of premium				
	Issuers	Issues	Total	Shares	Indices ¹	Currencies	Commodities
2014	6	8,574	3,644,239	1,770,915	1,697,295	99,964	76,065
2015	8	9,059	3,479,064	1,807,276	1,486,148	106,199	79,441
2016	5	7,809	2,688,574	1,438,206	1,153,143	57,305	39,920
2017	6	5,730	2,433,614	939,528	1,443,030	32,415	18,642
2018	5	5,231	2,084,891	818,952	1,160,478	48,767	56,695

Source: CNMV. (1) Includes baskets of securities and of indices.

Secondary market

The trading of warrants on the secondary market fell slightly in 2018 to 456.6 million euros, its lowest level in the last 15 years. Trading was mainly concentrated in index warrants, which accounted for 70% of the total, and, to a lesser extent, stock warrants, which accounted for 29%. Contracts with the other assets (currencies and commodities), which had grown in the year in the primary market, saw a reduction in trading to less than half the figure recorded in 2017 and only accounted for 1% of the total market.

Trading in warrants on the electronic market

TABLE 2.3.6

Premiums traded, in thousand euros

	No. of Issues	Premiums traded, by type of underlying				Total
		Indices ¹	Shares	Currencies ²	Commodities	
2014	7,612	364,302	430,984	14,209	8,202	817,698
2015	7,530	691,995	370,256	20,004	13,604	1,095,859
2016	6,296	420,353	280,953	5,025	9,209	715,541
2017	5,082	266,016	186,717	2,018	7,837	462,588
2018	4,191	317,881	133,863	1,390	3,542	456,676

Source: CNMV. (1) Includes baskets of securities and of indices. (2) Includes fixed-income warrants in the years in which these were traded.

Trading in certificates on the electronic market

TABLE 2.3.7

Premiums traded, in thousand euros

	No. of issues ¹	Premiums traded, by type of underlying				Total
		Indices ²	Shares	Currencies	Commodities	
2014	2	0.0	0.0	0.0	1,682.5	1,682.5
2015	2	0.0	0.0	0.0	1,135.1	1,135.1
2016	2	0.0	0.0	0.0	400.5	400.5
2017	2	0.0	0.0	0.0	362.2	362.2
2018	2	0.0	0.0	0.0	320.4	320.4

Source: CNMV. (1) The number of issues states the issues that recorded trading in each period. (2) Includes baskets of securities and of indices.

The amount of premiums traded in the certificates segment was once again very low due to the absence of new issues of this type of asset. Trading fell to 0.32 million euros, corresponding to the only two issues active on the market, whose underlying assets are gold and oil (both were issued by the same bank in 2007 and 2010, respectively).

2.3.5 Atypical financial contracts

During the year, 11 issues of atypical financial contracts were registered with the CNMV whereby a credit institution receives money from its clients and undertakes to reimburse them according to how one or a number of securities perform in the market, with no commitment to repay the principal received in full. Reimbursement consists of either the delivery of certain listed securities, or the payment of a sum of money, or both. These contracts are characterised by not being admitted to trading on organised secondary markets. The amount of the traded premiums totalled 953 million euros, less than half the 1.96 billion euros traded in 2017, with the underlying being mostly shares.

Issues of call and put options registered with the CNMV

TABLE 2.3.8

Thousand euros

	Number		Amount of premium				
	Issuers	Issues	Total	Shares	Indices ¹	Commodities	Exchange rates
2014	0	0	0	0	0	0	0
2015	1	1	5,000	5,000	0	0	0
2016	1	4	650,000	650,000	0	0	0
2017	2	15	1,964,500	1,950,000	14,500	0	0
2018	2	11	953,000	950,000	3,000	0	0

Source: CNMV. (1) Includes baskets of securities and of indices.

A new feature of regulation in this regard in 2018 is Royal Decree-Law 14/2018, of 28 September, which attributes jurisdiction over structured deposits (type of atypical financial contract that guarantees 100% of the capital) to the CNMV.

2.4 Clearing, settlement and registry

2.4.1 Iberclear

The Securities Registry, Clearing and Settlement Management Company (Sociedad de Gestión de los Sistemas de Registro, Compensación y Liquidación de Valores, S.A. Unipersonal), which operates under the business name of Iberclear, is the Spanish central securities depository. It provides the initial registration service (notary service), the service of provision and maintenance of securities accounts (central maintenance service or central deposit function) and manages the ARCO securities settlement system (settlement service), as well as other related ancillary services, in the terminology of the CSDR.³⁵

³⁵ Regulation (EU) No. 909/2014 of the European Parliament and of the Council, of 23 July 2014, on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No. 236/2012 (CSDR).

At the end of 2018, Iberclear had 67 participating entities (including central counterparties and other CSDs with which Iberclear has links), 1 fewer than at year-end 2017. In 2018, 4 entities registered and 5 entities deregistered, most as a result of merger processes.

2.4.1.1 Registration activity

Since its integration into Target2-Securities (T2S) in September 2017, Iberclear manages one single platform (ARCO), in which all securities are integrated.

At the end of the year, a total of 8,499 issues were registered with Iberclear, with a nominal amount of 1.66 trillion euros. Compared with the figures of the previous year, there was a fall both in the number of outstanding issues (-7.2%) and in their amount (-0.3%). This overall fall took place despite the increase in the number of issues and the amount of sovereign debt securities admitted, as shown in Table 2.4.1.

Iberclear ARCO. Registry

TABLE 2.4.1

Million euros

Securities registered	2017	2018	% change 18/17
Number of issues	9,155	8,499	-7.2
Public debt	472	486	3.0
Corporate debt	2,254	2,129	-5.5
Other securities	6,429	5,884	-8.5
Nominal balance registered	1,666,693	1,661,254	-0.3
Public debt	989,698	1,036,073	4.7
Corporate debt	530,290	485,873	-8.4
Other securities	146,705	139,308	-5.0

Source: Iberclear and CNMV.

2.4.1.2 Settlement activity

The total figure for settlement is not directly comparable with that for 2017 as fixed income was incorporated into the ARCO platform in September 2017, with implementation of phase II of the reform carried out in Spain in the clearing, settlement and registration systems, and the coding of the transactions does not allow for an exact match. However, according to the estimate made, it should be noted that, with regard to fixed income and in overall terms, activity fell significantly (by 56% in terms of the number of transactions and by 63% in cash terms). This is due to the fact that, following incorporation into Target2-Securities, balance movements within the same third-party account are no longer reported and calculated in Iberclear as they do not give rise to settlement instructions through the system.

With regard to equity trades from CCPs, the activity continues to shrink, in line with the market's lower level of activity. With regard to bilateral trading, it is estimated that there was an increase of 2.3% in the number of trades and 1.3% in the cash amount.

Iberclear SCL/ARCO. Registry

TABLE 2.4.2

Million euros

	2017		2018	
	Trades	Amount	Trades	Amount
Trades from CCPs	2,367,529	2,782,727	2,512,771	7,850,520
Sovereign debt ¹	78,490	2,092,330	282,626	7,167,911
Corporate debt ¹	–	–	–	–
Equity	2,289,039	690,397	2,230,145	682,609
Bilateral and platform trades	8,538,996	33,278,388	6,652,376	12,884,526
Sovereign debt ¹	2,703,625	30,742,801	1,167,172	11,520,441
Corporate debt ¹	556,919	1,321,559	85,074	134,177
Equity	5,278,452	1,214,028	5,400,130	1,229,909
TOTAL	10,906,525	36,061,115	9,165,147	20,735,046

Source: Iberclear and CNMV. (1) For 2017, sovereign and corporate debt securities include all types of transactions in the periods before and after 15 September, the date of phase II of the reform, when Iberclear was incorporated into T2S and fixed income into the ARCO platform. In addition, prior to incorporation into ARCO, transactions from fixed income CCPs could not be identified as they were processed as bilateral trades.

Iberclear. Settlement incidents ARCO

TABLE 2.4.3

Million euros

	2017		2018	
	Trades	Amount	Trades	Amount
Sovereign debt ¹	24,999	436,864	51,138	761,471
Corporate debt ¹	1,726	2,618	5,965	7,590
Equity	745,317	239,366	917,761	294,144
Total failed trades	772,042	678,848	974,864	1,063,205
Buy-ins and settlement in cash	104	2	78	9

Source: Iberclear and CNMV. (1) For 2017, the information on sovereign and corporate debt securities only corresponds to the period subsequent to 15 September, the date of phase II of the reform, when Iberclear was incorporated into T2S and the fixed income into the ARCO platform.

The figures on efficiency in fixed income and the total for 2018 are not directly comparable with those of 2017. This is due to the fact that for that year only the incidents corresponding to the period subsequent to 15 September, once the fixed-income securities were incorporated into the ARCO platform, were calculated. However, considering efficiency on this platform from that date, the percentage of failed trades in 2018 was lower than in the last 14 weeks of 2017 (4.3% of failed trades compared with 5.5% in 2017), with better performance of sovereign debt (4.1%) compared with corporate debt (7.5%).

For its part, inefficiency in equity rose to around 2%. This is due to the greater weight of bilateral trades, which generally have worse efficiency ratios.

2.4.2 BME Clearing

BME Clearing is the Central Counterparty (CCP) authorised to provide clearing services in Spain in accordance with Regulation (EU) 648/2012 of the European

Parliament and of the Council, of 4 July 2012, on OTC derivatives, central counterparties and trade repositories (EMIR).

Table 2.4.4 shows the distribution of active members in BME Clearing, differentiated by segment and by type of member. In 2018, 10 new entities registered while 10 deregistered, leaving the number of BME Clearing members at 132 at year-end.

Number of members in BME Clearing by segment

TABLE 2.4.4

Segment	Clearing			Non-clearing			Total entities	Change 18/17
	General	Individual	Special indiv.	Non-clearing	Ordinary	Proprietary		
BME Clearing Financial								
Derivatives	7	27	–	10	–	13	57	1
BME Clearing Energy	6	–	–	–	–	31	37	2
BME Clearing Repo	–	25	–	–	–	–	25	-3
BME Clearing Swap	–	8	–	–	–	–	8	0
BME Clearing Equity	9	16	5	–	24	–	54	-1
TOTAL ENTITIES (*)	17	50	5	10	24	44	132	–
Change 2017	-1	-1	-2	-1	1	4	0	–

Source: BME Clearing and CNMV. (*) The “total entities” row does not correspond to the sum by segments as one entity may participate in several segments.

2.4.2.1 BME Clearing Derivatives

Transactions in financial derivatives traded on MEFF are cleared in this segment. In the course of 2018, 7 entities deregistered and 6 registered, leaving the number of members at 57 at year-end (1 less than in 2017), as shown in Table 2.4.4.

2.4.2.2 BME Clearing Energy

The main new development in this segment in 2018 was the launch on 24 May of the new clearing service for natural gas contracts. Unlike electricity contracts, these contracts are settled by physical delivery at a Spanish virtual balancing point (VBP).³⁶ The new contracts that BME Clearing accepts for clearing are natural gas futures and spot transactions, as well as loan or deposit transactions. Specifically, the contracts traded on BME Clearing are day-ahead contracts and the whole range of natural gas futures (with weekly, monthly, quarterly, seasonal or annual maturities).

BME Clearing manages the risk and the margins as well as registering the positions, notifying the Spanish gas Transmission System Operator (TSO), Enagás, while performing the settlements and corresponding invoicing.

Current trading of gas derivatives in Spain is performed through bilateral OTC transactions. The volume of deliveries resulting from this trading is reported by means of notifications of gas transfers and acquisitions to the TSO (Enagás). In this

36 The virtual balancing point is the virtual exchange point of the transport network where users can transfer ownership of gas as entry or exit thereof.

context, BME Clearing clears contracts for two different types of gas: natural gas and liquefied natural gas. This latter type of gas must be processed in a regasification plant as a prior step to its conversion into natural gas and its subsequent commercial distribution. Natural gas contracts are settled by means of the notification to the TSO of the delivery of gas at the virtual balancing point, while liquefied natural gas contracts are settled by means of notification of the delivery to a regasification plant.

This activity was approved in 2017 and in April 2018, the CNMV Board approved the establishment of agreements between BME Clearing and three OTFs, the new category authorised under the MiFID II framework, for CCP clearing of the gas contract transactions executed therein. Since then and up to the end of the year, 22 participating entities have joined, with a registered volume up to December of 1.4 TWh.

In addition to gas, electricity derivatives (traded on MEFF) continued to attract the interest of entities active in the industry to become market participants, the number of which rose from 146 at the end of 2017 to 156 in the final months of 2018. Despite this trend, a lower number of contracts were registered and hence the registered volume of electricity derivatives fell by 30% in 2018 and stood at 12.5 TWh.

Activity in BME Clearing Energy

TABLE 2.4.5

Nominal volume in million euros

	2017			2018		
	Electricity	Gas	Total	Electricity	Gas	Total
Cash volume	854	–	854	689	35	724
Number of transactions	1,982	–	1,982	1,908	48	1,956
TWh	17.9	–	17.9	12.5	1.4	13.9

Source: CNMV and BME Clearing.

With regard to the number of members registered in this segment of BME Clearing, 1 entity de-registered in 2018 and 3 new entities were added, leading the total number of members to stand at 37 (2 more than in 2017), as shown in Table 2.4.4.

2.4.2.3 BME Clearing Equity

The equity segment is the central counterparty service for transactions in securities traded on the stock exchange. This segment began operating on 27 April 2016, the starting date of the new clearing, settlement and registry system, which made it obligatory for trading on shares and subscription rights carried out through multi-lateral segments of official secondary markets to be cleared through a CCP.

Another milestone was reached in September 2017 with the connection of Iberclear and BME Clearing to the pan-European securities settlement platform Target2-Securities, thus completing the second and final phase of the reform.

In 2018, a cash volume of 1.14 trillion euros was registered, 12.2% down on 2017, as shown in Table 2.4.6.

Activity in BME Clearing Equity

TABLE 2.4.6

	2017	2018
Nominal volume in million euros	1,294,553	1,136,782
Number of transactions	101,960,566	88,278,588

Source: CNMV and BME Clearing.

At the end of 2018, this segment had 56 clearing members, 2 more than at year-end 2017, after 4 new additions and 2 de-registrations (see Table 2.4.4).

2.4.2.4 BME Clearing Repo

The Repo fixed-income segment offers the central counterparty service for Spanish public debt repos, thus eliminating counterparty risk for participating entities.

In April 2018, the CNMV Board approved the establishment of an agreement between BME Clearing and BrokerTec to register trades of this platform in the repos segment. Financial institutions trade repos bilaterally and clear them in BME Clearing. Through this agreement, the banks that operate through the BrokerTec platform – the main platform for trading Spanish debt repos – can clear their transactions in BME's CCP, thus benefiting from access to greater liquidity.

Nevertheless, activity in this segment fell significantly in 2018. The total registered volume stood at 155.64 billion euros, with a monthly average of 190 trades. At the end of 2018, the average open position of the last 10 days, equivalent to the financing provided, stood at 8.24 billion euros, with an average financed term of 26 days.

A total of 3 members de-registered from this segment in 2018 and therefore the number of active members stood at 25 at the end of the year, all of which were individual clearing members.

Activity in BME Clearing Repo

TABLE 2.4.7

	2017	2018
Nominal volume (in million euros)	295,256	155,639
Number of transactions	4,915	2,145

Source: CNMV and BME Clearing.

2.4.2.5 BME Clearing Swap

This segment offers the central counterparty service for the trading of OTC interest-rate derivatives. It began operating in 2016.

Despite the changes over the past year, activity in this segment continued to fall. In 2018, only 11 transactions were registered for a nominal amount of under 150 million euros, well below the 47 transactions of 2017 for an amount of over 2.2 billion euros.

At year-end 2018, this segment had eight clearing members (no change on 2017), all individual clearers.

2.4.3 European initiatives in changes to registry, counterparty, clearing, and settlement services

Progress in the implementation of Regulation (EU) 909/2014 on improving securities settlement in the European Union and on central securities depositories (CSDR)

The Central Securities Depositories Regulation (CSDR) provides, together with T2S, a key basis for a single capital market. The aim of this Regulation is to establish standardised requirements for the settlement of financial instruments throughout the European Union and to harmonise the organisation and conduct of European CSDs.

The development of Level 2 implementing measures of the CSDR (level 1) began in 2017 and was completed on 13 September 2018 with publication in the *Official Journal of the European Union* of Commission Delegated Regulation (EU) 2018/1229, of 25 May 2018 (level 2), supplementing Regulation (EU) No. 909/2014 of the European Parliament and of the Council, with regard to regulatory technical standards on settlement discipline. This level 2 measure will enter into force in September 2020.

With regard to Level 3 measures, in order to help achieve the aim of ensuring supervisory convergence and a standardised implementation of the CSDR and of associated Level 2 measures, in 2018 ESMA published a series of guidelines, recommendations, opinions, and Q&As.

Among the most important guidelines were those concerning the process for calculating the indicators used to determine the most important currencies in which trades are settled, guidelines referring to the process for calculating the indicators used to determine the substantial importance of a CSD of a host Member State, and guidelines on the cooperation between authorities pursuant to Articles 17 and 23 of the CSDR. These sets of guidelines were published on 28 March 2018 on ESMA's website, and the CNMV has notified its intention to comply with them.

Lastly, in application of the provisions of Article 17 of the CSDR, since October 2017 Iberclear's authorisation process of as a CSD has been taking place under the terms of that Regulation. Work relating to this process by Iberclear, the CNMV and the Bank of Spain continued in 2018.

Finally, it is important to note the creation by the CNMV at the end of 2018 of a contact group on the clearing, settlement and registry system, as a channel for dissemination and for consultation with regard to national and European Union regulatory initiatives in the context of post-trading and also as a forum for discussion on application of issues that affect this sector and proposals for improvement.