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Abbreviations

AA. PP.	Public administration service
ABS	Asset-Backed Security
AIAF	Spanish Market in Fixed-income Securities
AIF	Alternative Investment Fund
ANCV	Spanish National Numbering Agency
APA	Approved Publication Arrangement
APR	Annual Percentage Rate
ASCRI	Spanish Venture Capital & Private Equity Association
AV	Broker
BIS	Bank for International Settlements
BME	Spanish Stock Markets and Financial Systems
CADE	Public Debt Book-entry Trading System
CC. AA.	Autonomous regions
CCP	Central Counterparty
CDS	Credit Default Swap
CFA	Atypical financial contract
CFD	Contract For Differences
CISMC	CIS Management Company
CNMV	(Spanish) National Securities Market Commission
CP	Crowdfunding Platform
CS	Customer Service
CSD	Central Securities Depository
CSRD	Central Securities Depositories Regulation
DLT	Distributed Ledger Technology
EAF	Financial advisory firm
EBA	European Banking Authority
EBITDA	Earnings Before Interest Taxes, Depreciation and Amortisation
EC	European Commission
ECA	Credit and savings institution
ECB	European Central Bank
ECR	Venture capital firm
EFAMA	European Fund and Asset Management Association
EFSM	European Financial Stabilisation Mechanism
EICC	Closed-ended collective investment company
EIOPA	Occupational Pensions Authority
EIP	Public interest entity
EMIR	European Market Infrastructure Regulation
EMU	Economic and Monetary Union
ESFS	European System of Financial Supervision
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
ETF	Exchange Traded Fund
EU	European Union
EUSEF	European Social Entrepreneurship Fund
FICC	Closed-ended collective investment fund

FII	Real estate investment fund
FIN-NET	Financial Dispute Resolution Network
FINTECH	Financial Technology
FOGAIN	Investment Guarantee Fund
FRA	Forward Rate Agreement
FROB	Fund for Orderly Bank Restructuring
FSB	Financial Stability Board
FTA	Asset securitisation fund
FTH	Mortgage securitisation fund
GDP	Gross Domestic Product
HF	Hedge Fund
HFT	High Frequency Trading
IAGC	Annual corporate governance report
IARC	Annual report on director remuneration
IAS	International Accounting Standards
ICIS	Collective investment company/scheme
ICO	Initial Coin Offering
IF	Investment Firm / Investment Fund
IFRS	International Financial Reporting Standards
IIMV	Ibero-American Securities Market Institute
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
IPO	Initial Public Offering (for sale/subscription of securities)
IPP	Periodic public information
IRR	Internal Rate of Return
ISIN	International Securities Identification Number
KIID/KID	Key Investor Information Document
Latibex	Market of Latin American Securities
LEI	Legal Entity Identifier
LIIC	Spanish Collective Investment Companies Act
LMV	Spanish Securities Market Act
MAB	Alternative Stock Market
MAD	Market Abuse Directive
MAR	Market Abuse Regulation
MARF	Alternative Fixed-Income Market
MBS	Mortgage Backed Securities
MEFF	Spanish Financial Futures Market
MFP	Maximum Fee Prospectus
MiFID	Markets in Financial Instruments Directive
MiFIR	Markets in Financial Instruments Regulation
MOU	Memorandum Of Understanding
MREL	Minimum Requirement for Own Funds and Eligible Liabilities
MTF	Multilateral Trading Facility
MTS	Market for Treasury Securities
NCA	National Competent Authority
NDP	National Domestic Product
OECD	Organisation for Economic Cooperation and Development
OIS	Overnight Indexed Swaps
OTC	Over The Counter
OTF	Organised Trading Facility
PER	Price-to-Earnings Ratio
PRIIP	Packaged Retail and Insurance Based Investment Product
PUI	Loan of last resort
RAROC	Risk-Adjusted Return On Capital

REIT	Real Estate Investment Trust
RENADE	Spanish National Registry for Greenhouse Gas Emission Allowances
RFQ	Request For Quote
ROA	Return On Assets
ROE	Return On Equity
SAMMS	Advanced Secondary Market Tracking System
SAREB	Asset Management Company for Assets Arising from Bank Restructuring
SENAF	Electronic Trading Platform for Spanish Government Bonds
SEND	Electronic Debt Trading System
SEPBLAC	The Executive Service of the Commission for the Prevention of Money Laundering and Monetary Offences
SGC	Portfolio management company
SGECR	Venture capital firm management company
SGEIC	Closed-ended investment scheme management company
SGFT	Asset securitisation fund management company
SIBE	Electronic Spanish Stock Market Interconnection System
SICAV	Open-ended collective investment company
SICC	Closed-ended collective investment company
SII	Real estate investment company
SIL	Hedge fund with legal personality
SME	Small and Medium Enterprise
SNCE	National Electronic Clearing System
SPV/SFV	Special purpose/financial vehicle
SRB	Single Resolution Board
SREP	Supervisory Review and Evaluation Process
STOR	Suspicious Transaction and Order Report
SV	Broker-dealer
T2S	Target2-Securities
TER	Total Expense Ratio
TOB	Takeover Bid
TRLMV	Recast text of the Spanish Securities Market Act
TVR	Theoretical Value of the Right
UCITS	Undertaking for Collective Investment in Transferable Securities
VCF	Venture Capital Firm / Venture Capital Fund
XBRL	Extensible Business Reporting Language

I Market survey (*)

(*) This report has been prepared by the Department of Studies and Statistics of the Directorate General for Strategic Policy and International Affairs of the CNMV.

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1 Overview

In 2021, the evolution of the international and national financial markets was determined by the state of the pandemic and the recovery of economic growth, to which was added a new element of risk: the rise in inflation. Although the general economic recovery on a global scale was confirmed in the first months of 2021, prompting notable revaluations in the stock markets, the second half of the year was more irregular. It was then found that growth in activity was uneven among countries and that it could be lower than initially forecast, due to factors such as rising energy costs, problems in some supply chains and the strong general rebound in prices. This last factor began to alter expectations regarding the future direction of monetary policy. The end of the year and the beginning of 2022 were marked by the sixth wave of coronavirus infections, and by the materialisation of tensions between Russia and Ukraine, which, in addition to having a direct impact on inflation through prices of gas and oil, could if they worsen continue to affect not only trends in energy prices but also the supply of energy and ultimately pose a significant risk to global economic, political and financial stability.

The international stock markets closed the 2021 financial year with significant revaluations, which ranged between 4.9% for the Japanese Nikkei 225 index and 28.9% of the French Cac 40[1] index. Most of the advanced economy indices grew by more than 20% in an environment of low market volatility and greater risk appetite. In general, the indices with greater concentrations of technology or health-related companies posted higher returns. The Spanish benchmark, the Ibex 35, showed a worse relative performance than that of other European indices, rising by just 7.9% in the year (with almost all of the advance occurring in the first quarter). This was the consequence of a less intense economic recovery than in other countries, since Spain's economic model is especially sensitive to the effects of the pandemic.

The debt markets evolved in tune with monetary policy, which continued to be eminently expansive, but with the prospect of a possible shift in the coming months caused by the rise in inflation, on which there is a debate as to how transient or otherwise it might prove. In the euro area, short-term interest rates remained at very low levels, while there were increases in longer term rates, especially in the first half of the year and at the end of the year. The 10-year Spanish sovereign bond yield closed the year at 0.60%, more than half a percentage point (pp) above the values at the end of 2020 (0.06%). The sovereign risk premium also increased, but with less intensity (from 63 basis points [bp] to 77 bp). In the primary markets, the debt issues of Spanish issuers fell by 2.1% in 2021, reaching €217.7 billion (-23.4% registered with the CNMV and +29.2% abroad).

1 The closing date of this survey is 31 December.

Summary of financial indicators

TABLE 1

	I 21	II 21	III 21	IV 21
Short-term interest rates[1] (%)				
Official interest rate	0.00	0.00	0.00	0.00
Euribor 3 months	-0.54	-0.54	-0.55	-0.58
Euribor 12 months	-0.49	-0.48	-0.49	-0.50
Exchange rates[2]				
Dollar/euro	1.17	1.19	1.16	1.13
Yen/euro	129.9	131.4	129.7	130.4
Yield on medium- and long-term government bonds[3]				
Germany				
3 years	-0.73	-0.69	-0.74	-0.72
5 years	-0.64	-0.59	-0.62	-0.56
10 years	-0.32	-0.20	-0.30	-0.31
United States				
3 years	0.31	0.39	0.47	0.95
5 years	0.82	0.83	0.86	1.23
10 years	1.61	1.51	1.37	1.46
Private debt risk premiums: spread on 10-year public debt[3] (bp)				
Euro area				
High yield	404	369	376	428
BBB	109	99	101	121
AAA	54	48	54	66
United States				
High yield	332	313	321	350
BBB	95	88	96	119
AAA	42	30	33	39
Equity markets				
Performance of the main international stock indices[4] (%)				
Eurostoxx 50	10.3	3.7	-0.4	6.2
Dow Jones	7.8	4.6	-1.9	7.4
Nikkei	6.3	-1.3	2.3	-2.2
Returns of other indices (%)				
Merval (Argentina)	-6.3	30.0	24.0	7.9
Bovespa (Brazil)	-2.0	8.7	-12.5	-5.5
Shanghai Comp. China	-0.9	4.3	-0.6	2.0
BSE (India)	5.4	7.7	11.7	-1.4
Spanish stock market				
Return of Ibex 35 (%)	6.3	2.8	-0.3	-0.9
PER of Ibex 35[5]	17.5	16.5	14.2	13.1
Volatility of Ibex 35[6] (%)	19.8	16.1	16.2	18.0
SIBE trading volumes[7]	1,465	1,472	1,192	1,672

Source: CNMV, Refinitiv Datastream and Madrid Stock Exchange.

1 Monthly average of daily data. The benchmark interest rate corresponds to the marginal rate of the weekly auction at the close of the period.

2 Data at the close of the period.

3 Monthly average of daily data. In the euro area, the spread is calculated relative to the German government bond.

4 Cumulative quarterly yields in each period.

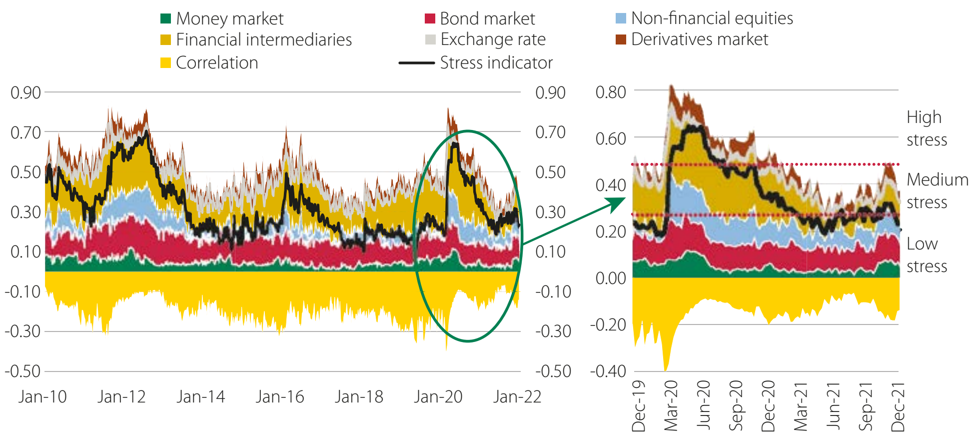
5 Price-to-earnings ratio (PER).

6 Implied volatility. Arithmetic average of the quarter.

7 Daily average, in millions of euros.

In Spain, the stress level of the financial markets[2] **hovered around medium values during 2021, being currently, at the beginning of 2022, at slightly below the average, although a higher level is observed in the fixed income segment.** The stress level started 2021 at 0.33, which corresponds to a medium stress regime. During the first half of the year, this indicator continued the downward trend that had begun after the worst moments of the COVID-19 crisis in 2020, as the financial markets continued to return to normal. The minimum level was reached in early June, when it stood at 0.19. In contrast, the second half of 2021, marked by some spikes in market volatility and price drops as a result of the elements of uncertainty mentioned in previous paragraphs, gave rise to a slightly upward trend in this indicator to just above the threshold separating low from medium stress (see Figure 1).

Spanish financial markets stress indicator FIGURE 1



Source: CNMV.

At the beginning of 2022, the stress level of the system stood at 0.23,[3] the highest being observed in the fixed income segment (0.46). The best annual balance occurred in the financial intermediaries segment – with a drop in its indicator from 0.75 to 0.35 –, as banks performed relatively better than other market participants during the past year.

2 The stress indicator calculated by the CNMV provides a real-time measure of systemic risk in the Spanish financial system that ranges from zero to one. To do this, it evaluates stress in six segments of the financial system and makes an aggregate, obtaining a single figure that takes into account the correlation among these segments. Econometric estimates indicate that index values below 0.27 correspond to periods of low stress, while scores between 0.27 and 0.49 correspond to periods of medium stress, and values above 0.49 indicate periods of high stress. For further details on recent movements in this indicator and its components, see the CNMV's quarterly *Financial Stability Note* and its statistical series (market stress indicators), available at http://www.cnmv.es/portal/menu/Publicaciones-Estadisticas-Investigacion.aspx?lang=en. For more information on the methodology of this index, see Cambón, M.I. and Estévez, L. (2016). "A Spanish Financial Market Stress Index (FMSI)". *Spanish Review of Financial Economics,* Vol. 14, No. 1, pp. 23-41 or as CNMV Working Paper No. 60 (http://www.cnmv.es/DocPortal/Publicaciones/MONOGRAFIAS/Monografia_60_en.pdf).

3 This indicator has a weekly frequency. The data presented in this report correspond to 7 January.

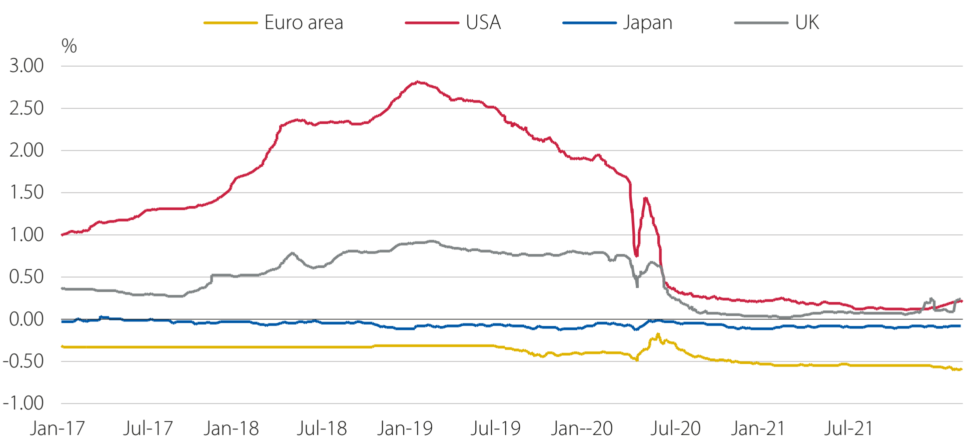
2 Fixed income markets

2.1 Interest rates

During 2021, short-term interest rates in the main advanced economies continued to show very small spreads, at their lowest since 2016. The spread during the year between the 3-month interest rates in the United States and in the euro area was on average 71 bp, although it widened slightly in the last days of the year to 79 bp, due to the increase in US interest rates, which began to reflect the change in bias in US monetary policy foreseen for the coming months, which is discussed below.

Throughout last year, the Federal Reserve kept the official interest rate in the range of 0-0.25% (unchanged since March 2020). However, at its last meeting of the year, the Fed announced an acceleration of its stimulus withdrawal plan, now scheduled for March 2022 (it was initially scheduled for June). Based on trends in inflation and the labour market, the FED decided to double the rate of reduction of bond purchases in 2022, which it had set in November at US$30 billion.[4] In addition, the members of the Open Market Committee themselves foresee three increases in interest rates in 2022, to place them between 0.75% and 1%. In this context, 3-month interest rates, which had fallen during the first half of the year and shown signs of stability in subsequent months, began an upward trend from November, reaching 0.21% at the end of December, 8 bp more than at the beginning of the fourth quarter and 3 bp less than at the end of 2020 (see Figure 2).

3-month interest rates FIGURE 2



Source: Refinitiv Datastream. Data up to 31 December.

In the euro area, 3-month interest rates hardly changed in 2021, with a slight decrease of 3 bp compared to 2020, which placed them at -0.57% at the end of the year. This stability responded to the monetary policy of the European Central Bank (ECB), which, in its December meeting, continued to maintain the levels of official interest rates: those of the main refinancing operations, the marginal lending facility and

4 Figures on total monthly purchases of US$120 billion in Treasury bonds and mortgage assets. The reduction will increase to US$60 billion from January.

the deposit facility at 0%, 0.25% and -0.50% respectively. However, it announced that it will significantly reduce the pace of asset purchases under the pandemic emergency purchase programme (PEPP)[5] compared to previous quarters and will end it in March 2022, as planned. However, net purchases under this programme could be reactivated if necessary to offset possible negative effects related to the pandemic. In parallel, starting in March, the ECB will temporarily increase purchases under the asset purchase programme (APP),[6] and is expected to end them just before starting the process of raising interest rates.[7]

Despite the reduction in spreads, interest rates continued to be higher in the United States, with increases also being observed in the final stretch of the year as a result of the expected change in the country's monetary policy (the same thing happened in the United Kingdom). Thus, the United States and the United Kingdom saw the largest variations in short-term rates in 2021, especially the latter. In the United States, 6-month and 12-month interest rates stood at 0.31% and 0.52%, respectively in December[8] (4 and 17 bp respectively more than in December 2020) and in the United Kingdom these rates stood at 0.36% and 0.72% in December respectively (33 bp and 62 bp more than in 2020). For their part, in the euro area and in Japan, the 6- and 12-month rates hardly changed and ended the year at levels very close to those of 2020.

5 The Governing Council will continue to make purchases under the Pandemic Emergency Purchase programme (PEPP) until the end of March 2022, although at a slower pace than in previous quarters. The programme currently has €1.85 trillion and the principal of the securities acquired will be re-invested at least until the end of 2024.

6 Net purchases under this programme will increase to a monthly rate of €40 billion in the second quarter of 2022 (double that of previous months) and €30 billion in the third quarter. They will be reduced to €20 billion from October for as long as necessary to reinforce the impact of its official interest rates. They are expected to come to an end shortly before the start of the ECB rate hikes.

7 In mid-January 2022, the president of the ECB indicated that the institution takes the concern of agents about the rise in inflation seriously. She reiterated the bank's commitment to price stability, and gave an assurance that it would take all necessary measures to bring inflation to 2% in the medium term.

8 Monthly average of daily data.

Short-term interest rates[1]

TABLE 2

%

	Dec-18	Dec-19	Dec-20	Dec-21	Mar-21	Jun-21	Sep-21	Dec-21
Euro area								
Official[2]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 months	-0.31	-0.40	-0.54	-0.58	-0.54	-0.54	-0.55	-0.58
6 months	-0.24	-0.34	-0.52	-0.54	-0.52	-0.51	-0.52	-0.54
12 months	-0.13	-0.26	-0.50	-0.50	-0.49	-0.48	-0.49	-0.50
United States								
Official[3]	2.50	1.75	0.25	0.25	0.25	0.25	0.25	0.25
3 months	2.79	1.91	0.23	0.21	0.19	0.13	0.12	0.21
6 months	2.89	1.90	0.26	0.31	0.20	0.16	0.15	0.31
12 months	3.08	1.97	0.34	0.52	0.28	0.24	0.23	0.52
United Kingdom								
Official	0.75	0.75	0.10	0.25	0.10	0.10	0.10	0.25
3 months	0.90	0.79	0.03	0.16	0.08	0.08	0.07	0.16
6 months	1.03	0.87	0.04	0.36	0.10	0.11	0.12	0.36
12 months	1.16	0.97	0.10	0.72	0.16	0.17	0.27	0.72
Japan								
Official[4]	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
3 months	-0.10	-0.06	-0.10	-0.08	-0.08	-0.09	-0.08	-0.08
6 months	0.00	0.01	-0.06	-0.05	-0.05	-0.06	-0.07	-0.05
12 months	0.11	0.11	0.05	0.05	0.05	0.05	0.06	0.05

Source: Refinitiv Datastream.

1 Monthly average of daily data, except official rates, which correspond to the close of the period. Data up to 31 December.

2 Minimum bid rate at weekly auctions.

3 Federal funds rate.

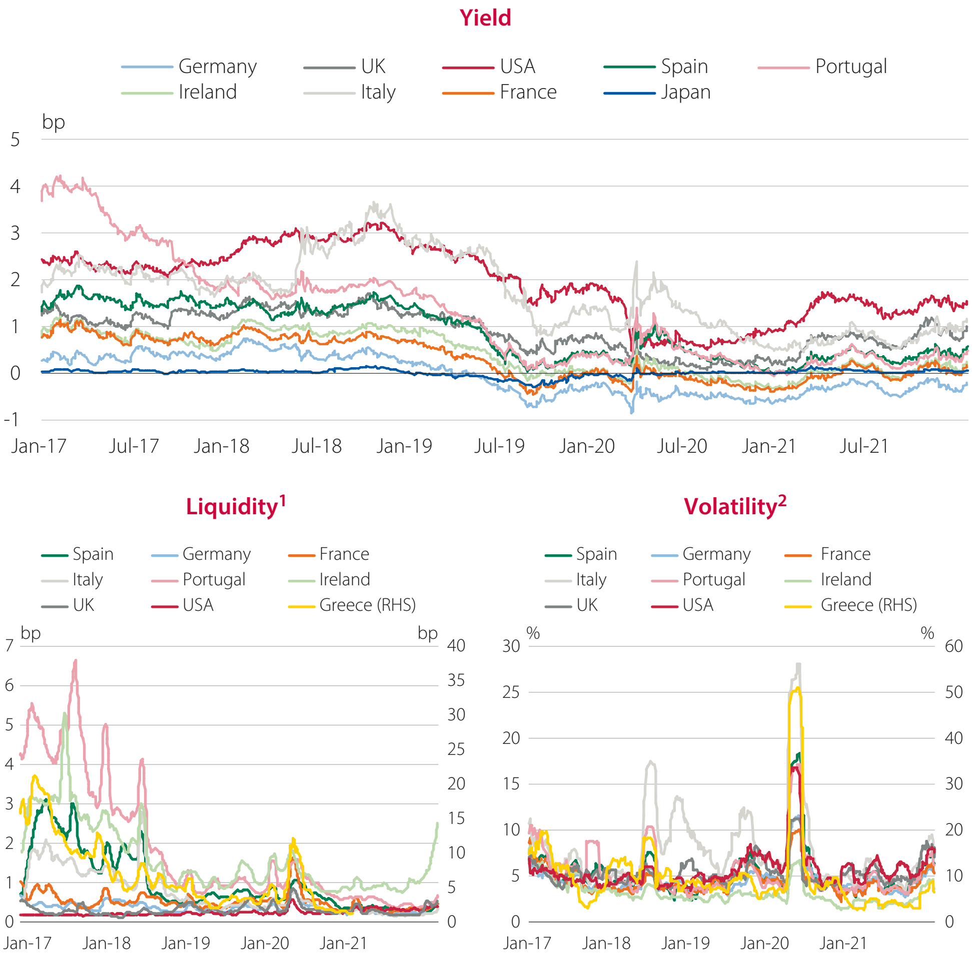
4 Monetary policy rate.

Regarding interest rate expectations, forward rates (FRA) point to an increase in short-term references in the euro area and the United States in 2022, as well as to a difference between them, since a more pronounced increase in interest rates in the United States is expected than in the euro area (current rates have factored in a 25 bp rise in euro area rates by the end of 2022 and a 75 to 100 bp rise in US rates over the course of the year).

The long-term interest rates of the sovereign bonds of most advanced economies followed a fairly uniform trend during the year, with general increases compared to the values at the end of 2020, although some decreases were registered during the summer months and part of the fourth quarter, as shown in the upper panel of Figure 3. The cumulative increases for the year are explained by a context of higher growth, as well as by the rise in inflation and the foreseeable withdrawal of monetary stimulus measures by the central banks. The rise in inflation is largely due to the rise in the price of raw materials, particularly oil and gas, which has not only been influenced by the increase in demand in a context of recovery, but also other elements such as the conflict between Russia and Ukraine. This conflict has emerged as a major risk factor that may continue to affect not only the evolution of energy prices, but also energy supply and economic activity.

In Europe, interest rates on 10-year public debt evolved unevenly over the course of the last quarter of the year, with decreases from November and increases in the last weeks of December. The peripheral countries of the euro area recorded the most significant rises, ranging from 12 bp in Portugal to 47 bp in Greece (13 bp in Spain), while Germany and France saw quarterly increases of just 2 bp and 4 bp respectively. For the year as a whole, the increase in sovereign debt yields in Europe ranged between 40 bp for the German bond and 69 bp for the Greek bond (54 bp for the Spain's), despite which these yields remained at low levels in historical terms: below 0% in Germany and the Netherlands, between 0% and 1% in Austria, Finland, Ireland, Portugal, Spain, France and Belgium, and above 1% in Italy and Greece.

10-year sovereign bond market indicators FIGURE 3



Source: Bloomberg, Refinitiv Datastream and own calculations. Data up to 31 December.

1 Monthly average daily bid-ask spread on 10-year sovereign bond yields.

2 Annualised standard deviation of daily changes in the prices of sovereign bonds over a 40-day period.

In the United States, the same trend was observed in sovereign bond interest rates, with increases in the first and third quarters and falls in the second and fourth. However, the cumulative balance for 2021 in the United States shows a significant rise of 59 bp to 1.50% at the end of the year.

Medium- and long-term government bond yields[1] TABLE 3

%

	Dec-18	Dec-19	Dec-20	Dec-21	Mar-21	Jun-21	Sep-21	Dec-21
Germany								
3 years	-0.53	-0.62	-0.78	-0.72	-0.73	-0.69	-0.74	-0.72
5 years	-0.27	-0.54	-0.75	-0.56	-0.64	-0.59	-0.62	-0.56
10 years	0.25	-0.27	-0.57	-0.31	-0.32	-0.20	-0.30	-0.31
United States								
3 years	2.68	1.64	0.19	0.95	0.31	0.39	0.47	0.95
5 years	2.68	1.68	0.38	1.23	0.82	0.83	0.86	1.23
10 years	2.83	1.86	0.93	1.46	1.61	1.51	1.37	1.46
United Kingdom								
3 years	0.74	0.53	-0.07	0.61	0.17	0.18	0.35	0.61
5 years	0.90	0.58	-0.04	0.67	0.36	0.35	0.48	0.67
10 years	1.27	0.78	0.26	0.83	0.78	0.77	0.81	0.83
Japan								
3 years	-0.14	-0.14	-0.14	-0.11	-0.12	-0.12	-0.12	-0.11
5 years	-0.13	-0.11	-0.11	-0.09	-0.08	-0.10	-0.10	-0.09
10 years	0.04	-0.02	0.02	0.05	0.10	0.06	0.04	0.05

Source: Refinitiv Datastream.

1 Monthly average of daily data. Data up to 31 December.

In Spain, the debt markets, like those in the rest of Europe, evolved in 2021 in line with the policy of low interest rates maintained by the ECB, which manifested itself more intensely in the shorter sections of the curve. In the long tranches, a slight rebound in yields was observed, which responded to several factors, notably the uptick in inflation and the expectation of a reduction or termination of the ECB's debt purchase programmes over the course of 2022. Thus, the yield on Spanish public debt at 10 years ended 2021 at 0.60%,[9] above the 0.06% at the end of 2020.

Regarding the issue of fixed-income assets by Spanish private issuers, 2021 marked a return to the trends observed in recent years, temporarily interrupted in 2020 in the context of the crisis. Thus, issues of these instruments registered with the CNMV fell by 23.4% to €101.2 billion, while those carried out abroad increased notably, by 29.2%, to €116.5 billion.

Short-term public debt interest rates continued to fall in the fourth quarter of the year, continuing the trend of the two previous quarters and setting new record lows. The yield on this debt thus remained at negative values for the entire short section of the curve, as a result of the ECB's maintaining official rates at current levels.[10] Thus, the average yield on Treasury bills at 3, 6 and 12 months in December on the secondary market stood at -0.77%, -0.63% and -0.60% respectively, values

9 The average for December, discussed below, was 0.43%.

10 The rates for main refinancing operations, the marginal lending facility and the deposit facility were 0%, 0.25% and -0.5% respectively.

between 3 and 15 bp lower than those of the third quarter (see Table 4). The annual balance of these interest rates shows decreases of 7 bp for the 3-month yield and 4 bp for the 6-month yield, while in the 12-month term it registers a slight increase of 3 bp. In contrast, the return on short-term private fixed income assets experienced increases in the fourth quarter, of between 3 and 25 bp depending on the term. At the end of the year, these interest rates stood at 0.38%, 0.5% and 0.81% for terms of 3, 6 and 12 months, respectively. The annual balance presents more intense falls – between 5 and 63 bp – than in the case of public debt.

Short-term interest rates[1] TABLE 4

%

	Dec-18	Dec-19	Dec-20	Dec-21	Mar-21	Jun-21	Sep-21	Dec-21
Treasury bills								
3 months	-0.50	-0.58	-0.70	-0.78	-0.54	-0.58	-0.62	-0.77
6 months	-0.41	-0.47	-0.59	-0.63	-0.54	-0.57	-0.59	-0.63
12 months	-0.33	-0.48	-0.63	-0.60	-0.50	-0.54	-0.57	-0.60
Commercial paper[2]								
3 months	0.24	0.20	0.49	0.38	0.14	0.00	0.24	0.38
6 months	0.19	0.52	0.55	0.50	0.51	0.27	0.47	0.50
12 months	0.07	0.71	1.44	0.81	0.72	0.67	0.56	0.81

Source: Refinitiv Datastream and CNMV.

1 Monthly average of daily data.

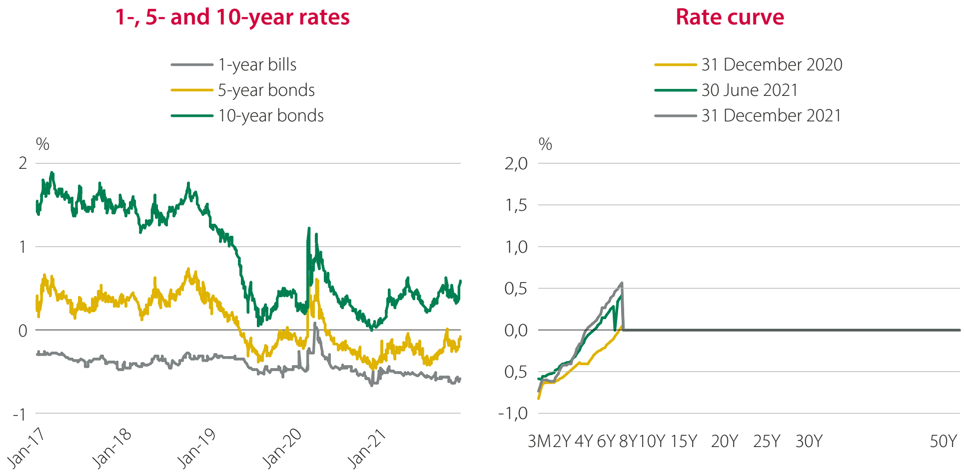
2 Issue interest rates.

Long-term yields evolved differently (see Figure 4), with rises in the fourth quarter of between 7 and 14 bp in public debt assets and between 12 and 17 bp in private fixed-income assets, as these yields incorporated the increase in inflation and inflationary expectations, in a context of recovering activity. The yield on long-term debt assets had already shown clearly upward behaviour in the first five months of the year, when unexpected increases in prices began to be observed and subsequently experienced certain ups and downs that responded not to change not only in inflation but also in economic activity and investors' risk appetite. In addition, the ECB indicated at its last meeting of the year the path by which it would reduce the amount of its asset purchase programmes in 2022.[11] Thus, in December 2021, the yields on public debt at 3, 5 and 10 years stood at -0.46%, -0.18% and 0.43% (average for the month), respectively, and those on private fixed income at the same terms at 0.12%, 0.13% and 0.56%. In both cases, the annual balance shows increases that range between 7 and 38 bp. (see Table 5).

11 See footnotes 3 and 4 of this report.

Yields on Spanish public debt

FIGURE 4



Source: Refinitiv Datastream and Bloomberg. Data up to 31 December.

Medium- and long-term fixed income yields[1]

TABLE 5

	Dec-18	Dec-19	Dec-20	Dec-21	Mar-21	Jun-21	Sep-21	Dec-21
Public sector fixed income								
3 years	-0.04	-0.29	-0.53	-0.46	-0.41	-0.42	-0.51	-0.46
5 years	0.44	-0.06	-0.42	-0.18	-0.24	-0.22	-0.32	-0.18
10 years	1.43	0.45	0.05	0.43	0.34	0.44	0.36	0.43
Private sector fixed income								
3 years	0.67	0.20	-0.20	0.12	-0.08	-0.16	-0.05	0.12
5 years	0.55	0.23	-0.13	0.13	-0.15	-0.15	-0.02	0.13
10 years	1.52	0.79	0.41	0.56	0.45	0.58	0.44	0.56

Source: Refinitiv Datastream, Reuters and CNMV.

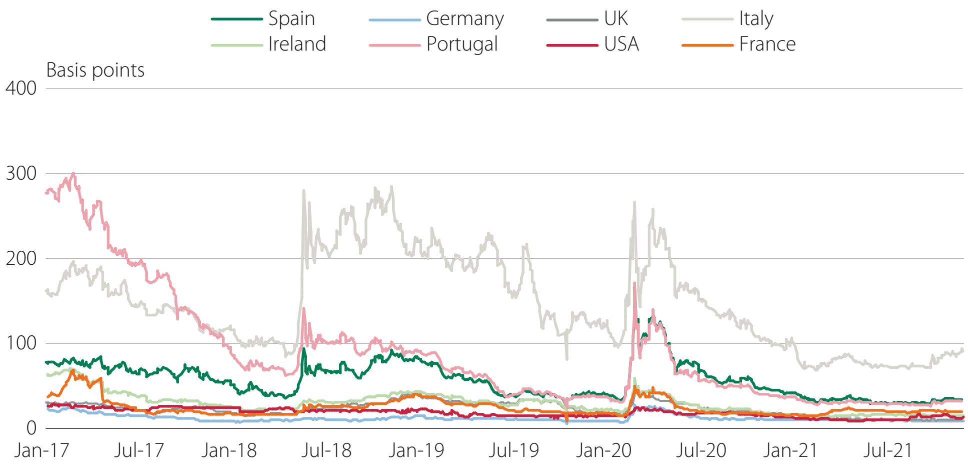
1 Monthly average of daily data.

2.2 Risk premiums

Sovereign credit risk premiums (see Figure 5), evaluated through 5-year CDS (credit default swap) contracts for advanced economies, generally showed irregular behaviour over the course of the year, with declines during the first half and slight rises in the rest of the year, especially in peripheral euro area countries. In the last quarter of the year, the increases in risk premiums in Italy (by 18 bp, to 92 bp) and Greece (by 36 bp to 112 bp) stood out, while in Spain and Portugal they increased by 4 bp (to 35 bp in Spain and 32 bp in Portugal) and in Germany and France they remained unchanged. In the cumulative figure for the year, decreases were observed in most cases, except for the readings of France and Greece (where they increased by 4 bp and 10 bp respectively). In the rest of the European economies, the decrease in risk premiums was between 1 bp (in Ireland, Austria, Belgium, Norway, the Netherlands and Sweden) and 8 bp (Spain). In the United Kingdom the decrease was 7 bp (to 11 bp at the end of the year) and in the United States it was 1 bp, to 13 bp.

Sovereign debt credit risk premiums (5-year CDS)

FIGURE 5



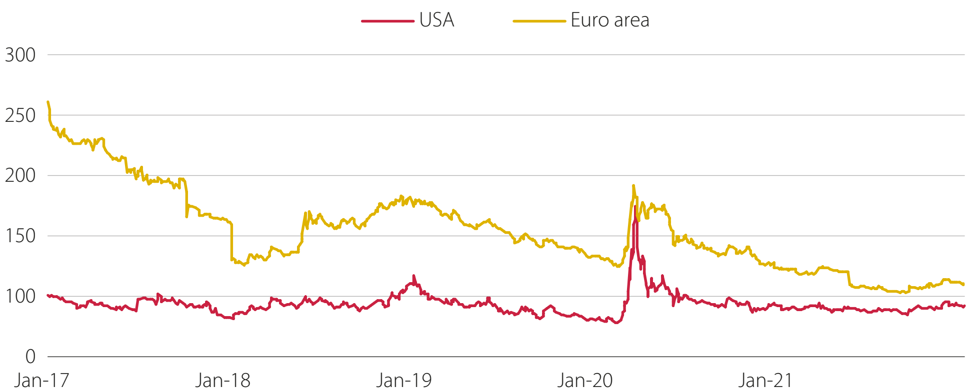
Source: Refinitiv Datastream. Data up to 31 December.

For its part, the risk premium for the banking sector (see Figure 6) in both the euro area and the United States maintained a downward path for most of 2021, that of the US economy being steeper. Thus, this indicator fell in the year as a whole by 1 bp in the euro area (to 51 bp) and by 15 bp (to 74 bp) in the United States.

Corporate debt risk premiums also followed a downward trend throughout most of the year, which was reversed in the final months of the year. As in the case of financial entities, the increases did not compensate for the falls in the first half of the year, so that in the accumulated balance, decreases were observed in all debt tranches, except for AAA debt in the euro area. The largest annual declines were experienced in the high yield tranche: 66 bp in the United States and 29 bp in the euro area[12] (to 341 bp and 414 bp at the end of December, respectively). In general, the environment of very low interest rates, especially in the euro area, continues to favour the search for yield through investment in higher risk assets (see Table 6).

Banking sector credit risk premiums (5-year CDS)

FIGURE 6



Source: Refinitiv Datastream, indices prepared by CMA. Data up to 31 December.

12 In the fourth quarter, these risk premiums increased by 25 bp and 39 bp respectively.

Private debt risk premiums[1]

TABLE 6

Spread vs. 10-year government debt, basis points

	Dec-18	Dec-19	Dec-20	Dec-21	Mar-21	Jun-21	Sep-21	Dec-21
Euro area[2]								
High yield	605	489	443	428	404	369	376	428
BBB	199	137	124	121	109	99	101	121
AAA	86	66	53	66	054	48	54	66
United States								
High yield	485	430	418	350	332	313	321	350
BBB	192	141	126	119	95	88	96	119
AAA	72	46	47	39	42	30	33	39

Source: Refinitiv Datastream.

1 Monthly average of daily data. Data up to 31 December.

2 Spread vs. the German bond.

In Spain, the sovereign risk premium[13] closed the year at low levels (77 bp) thanks to the ECB's purchase programmes,[14] although its overall evolution in 2021 was, with ups and downs, slightly upward (see Figure 7). At the end of 2021, this indicator was 11 bp above the closing level of the third quarter (66 bp) and 14 bp above that of the end of 2020 (63 bp). This slight upward trend could be explained by the downward revisions to growth expected for the Spanish economy, which is showing a less intense recovery than was forecast a few months ago, and by the deterioration in the pandemic in the final stretch of the year. For its part, the sovereign risk premium estimated using the CDS of the Spanish sovereign bond – the market for which is less liquid than that of the underlying bond – showed much smaller variations, ending the year at 35 bp, barely 4 bp more than in the third quarter and below its year-end 2020 level.

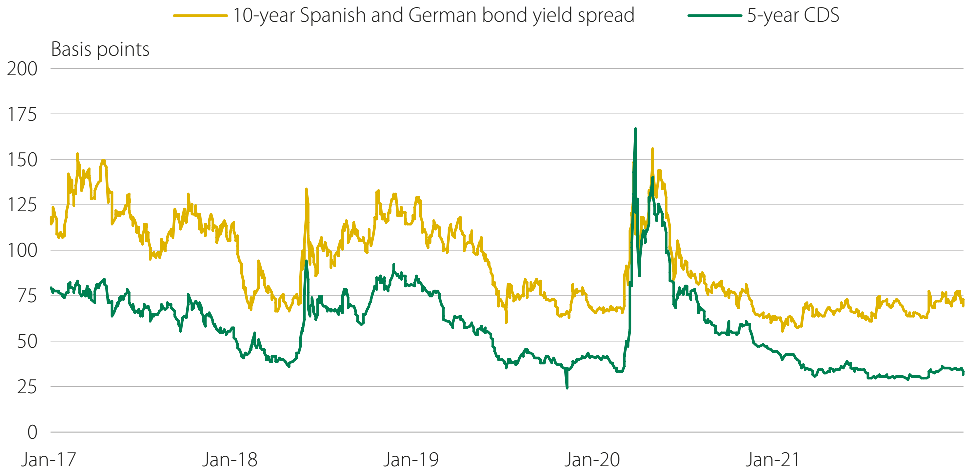
In the case of the risk premiums of the private subsectors of the economy, very slight increases were observed in the last months of the year for those of financial entities and while those of non-financial companies held steady. The average CDS premiums for the former ended the year at 64 bp, slightly above the end of the third quarter (62 bp), but below the values registered at the end of 2020 (78 bp). In the case of non-financial entities, average CDS premiums ended 2021 at 53 bp, compared with 55 bp in the third quarter and 59 bp at the end of 2020. Once again, the low levels of risk premiums are explained, above all, by the measures adopted by the ECB, so in coming quarters, in an environment of less intense recovery and gradual withdrawal of these measures – at least of the debt purchase programmes[15] – we cannot rule out certain increases in these types of indicator.

13 Measured as the difference between the return on the Spanish sovereign bond and the German 10-year bond.

14 The ECB acquires public debt under two programmes: the PSPP (Public Sector Purchase Programme), through which it had accumulated net purchases of public debt at the end of November of €2.62 trillion, of which €303.52 billion corresponded to Spanish debt, and the PEPP (Pandemic Emergency Purchase Programme), through which it buys different types of debt, most notably public debt. Within this latter programme, the ECB had acquired €1.5 trillion in these assets, of which €170.31 billion corresponded to Spanish debt. Therefore, the total amount of Spanish debt in the hands of the ECB was close to €474 billion (44% of the balance of long-term State debt).

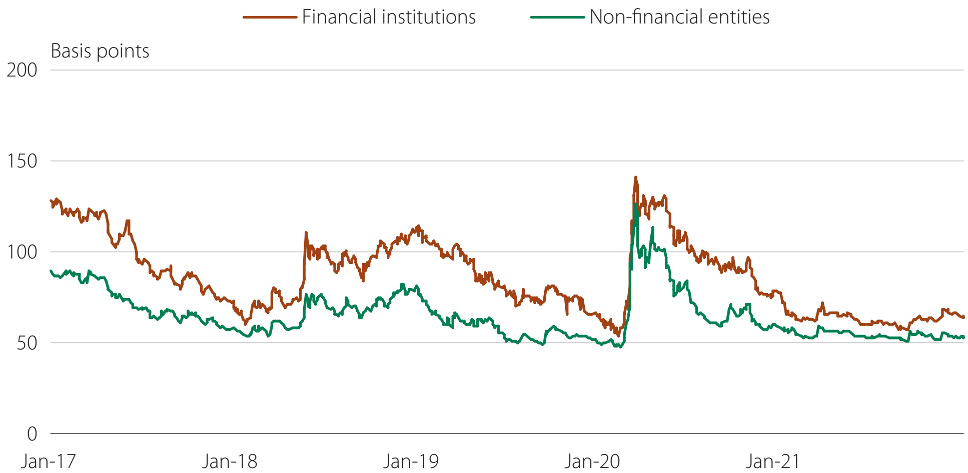
15 The ECB acquires debt assets issued by both financial and non-financial entities under its various purchase programmes. In the case of financial institutions, it acquires asset securitisation bonds as part of

Risk premium paid by Spanish issuers: public sector FIGURE 7



Source: Refinitiv Datastream and own calculations. Data up to 31 December.

Risk premium of Spanish issuers: private sector[1] FIGURE 8



Source: Refinitiv Datastream and own calculations. Data up to 31 December.

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

2.3 Debt issues

Gross debt issues in international markets amounted to US$15.4 trillion in 2021, 1.1% more than in 2020, with differing patterns observed among regions and issuers (see Figure 9). Thus debt issues increased in both the United States and Japan (by 12.6% to US$8.3 trillion and by 7.9% to US$1.6 trillion respectively), while in

the ABSPP programme (€29.01 billion) and mortgage bonds under the CBPP3 (€298.48 billion) and PEPP (€6.08 billion) programmes. In the case of non-financial entities, the ECB buys corporate debt that meets certain conditions within the CSPP programme (€309.88 billion) and under the PEPP it acquires both corporate debt (€39.87 billion) and commercial paper (€4.03 billion). The figures correspond to the end of November or mid-December depending on the programme.

Europe debt issues fell by 23.5% to US$2.7 trillion, due mainly to the decrease in sovereign debt issues. By sectors, there were increases in the amount of issues in the financial sector (33.8%), which offset the decreases in those of the public sector (-1.5%) and the non-financial private sector (-16.5%).

In a context of lower financing needs after the crisis, gross sovereign debt issuances decreased slightly compared with 2020 (by 1.5% to US$10.1 trillion). The steepest fall was observed in Europe, with a decline of 42.1%, to US$1.3 trillion. In the United States and Japan, on the other hand, there were increases in sovereign debt issues (17.2% and 8.7%, respectively), driven above all by the amounts issued in the first half of the year.

International gross fixed income issues FIGURE 9

Source: Dealogic. Half-yearly data up to 31 December.

Private sector issues performed differently according to subsectors, with notable increases in the financial sector and decreases in the non-financial sector. In the former, the aggregate amount of these issues was US$3 trillion, 33.8% more than in 2020. On the other hand, non-financial entities recorded a decline in their debt issues of 16.5% compared with 2020 (to US$2.3 trillion). All regions posted falls, although those of the USA were the sharpest (-28.3% to US$1 billion). In Europe and Japan, the decreases were 11.6% and 5.4%, to US$549.77 billion and US$167.71 billion respectively.

As for Spain, fixed income issues showed similar patterns to those existing before the COVID-19 crisis. Thus, in 2021 the total volume of fixed income issues was €217.70 billion,[16] somewhat less than the €222 billion of the previous year. The decrease had its origin exclusively in the issues registered with the CNMV, which came to €101.20 billion, well below the €132.10 billion registered in 2020. The trend in the volume of issues registered with the CNMV has been declining for several years, although it was interrupted in 2020 when entities covered their liquidity needs by increasing, above all, their securitisation issues in Spain. On the other hand, debt issues made abroad, which fell in 2020, once again showed great dynamism in 2021, coming to €116.50 billion (in the absence of 1 month of data), well above the €90.20 billion of 2020 and the highest figure since 2011.

As can be seen in Table 7, the amount of debt issues registered with the CNMV in the fourth quarter of the year came to €27.32 billion, half the amount registered in the same quarter of 2020. The sharp drop in issues in the final stretch of the year explains nearly 90% of the total annual decrease in issues and is due solely to the drop in issues of securitisation bonds (nearly €19.50 billion less than in 2020) and simple bonds (nearly €12.70 billion less). On the other hand, in the last three months of the year there was an increase in the issue of covered bonds and territorial bonds and, to a lesser extent, of preference shares.

For the year as a whole, as previously mentioned, the amount of debt issues registered with the CNMV was close to €101.20 billion, 23.4% less than in 2020. By type of instrument, it is worth highlighting the increase in covered bond issues (up by 25% to almost €29 billion) and, to a lesser extent, in preference shares. On the other hand, there was a sharp drop in securitisation (-49%) and bond (-24%) issues, which is largely explained by the evolution of issues carried out by SAREB[17] (Management Company for Assets Arising from Bank Restructuring). Commercial paper issues fell less sharply (-9.5%). By sector of issuers, decreases were observed in debt issues of both financial institutions (-24.9%) and non-financial companies (-7.8%), the latter increasing their relative weight in the volume of issues.

Regarding the issues made abroad, it is worth noting both their amount in the fourth quarter, which, in the absence of 1 month of data, came to nearly €29 billion (50% more than a year before), as well as the weight of short-term issues, which accounted for 55% of he total. For the year as a whole, the volume of issues carried out abroad amounted to €116.50 billion, 29% more than in 2020. Finally, it is worth highlighting the decrease in debt issues carried out by the subsidiaries of Spanish issuers in the rest of the world, which totalled €66.60 billion in 2021, 6.2% less than in 2020, due above all to the decrease in issues by subsidiaries of financial institutions.

Lastly, with regard to the activity registered in the Spanish trading venues, once again the sharp drop in activity in the Electronic Debt Trading System (SEND) stands out. At €46.70 billion for 2021, trading volumes were 66% less than in 2020. 57% of trading corresponded to Spanish public debt and the rest to foreign debt. Apart

16 The amount of debt issues with ESG (environmental, social and governance) characteristics was close to €13 billion.

17 The decrease in issues of this institution in 2021 was close to €6.80 billion.

from this, trading in organised trading facilities (OTFs) authorised by the CNMV, of which there were three at the end of the year,[18] was €516.35 billion, which was also less than in 2020 (-6.4%). 72% of this trading corresponded to Spanish fixed income assets (most of them public debt).

Gross fixed income issues of Spanish issuers

TABLE 7

Registered with the CNMV

					2021			
	2018	2019	2020	2021	I	II	III	IV
NOMINAL AMOUNT (type of instrument, millions of euros)	**101,296**	**90,165**	**132,111**	**101,171**	**23,638**	**24,728**	**25,485**	**27,320**
Covered bonds	26,575	22,933	22,960	28,700	3,500	9,000	9,450	6,750
Territorial bonds	2,800	1,300	9,150	5,500	0	3,500	0	2,000
Non-convertible bonds	35,836	29,606	33,412	25,257	9,669	1,506	807	13,274
Convertible/exchangeable bonds	0	0	0	0	0	0	0	0
Securitisation bonds	18,145	18,741	36,281	18,376	5,030	5,674	7,184	488
Commercial paper[1]	15,089	15,085	22,292	20,180	4,241	5,049	7,293	3,597
Securitisation	240	0	0	0	0	0	0	0
Other commercial paper	14,849	15,085	22,292	20,180	4,241	5,049	7,293	3,597
Other fixed income issues	0	1,500	6,266	823	823	0	0	0
Preferred shares	2,850	1,000	1,750	2,335	375	0	750	1,210
Pro memoria:								
Subordinated issues	4,923	3,214	14,312	4,600	1,022	1,208	1,806	563
Underwritten issues	0	0	0	0	0	0	0	0
NOMINAL AMOUNT (sector of issuer, millions of euros)	**101,296**	**90,165**	**132,121**	**101,171**	**23,638**	**24,728**	**25,485**	**27,320**
Financial institutions	96,926	80,424	114,129	85,683	21,208	20,202	20,877	23,397
Long term	82,830	72,210	106,770	79,336	19,398	19,179	17,937	22,822
SAREB	29,751	20,505	27,867	21,077	9,470	0	0	11,607
Short term	14,097	8,215	7,359	6,347	1,810	1,022	2,940	575
Non-financial companies	1,688	7,471	16,792	15,488	2,431	4,527	4,608	3,923
Long term	695	600	1,850	1,655	0	500	255	900
Short term	993	6,871	14,942	13,833	2,431	4,027	4,353	3,023
Public administrations	2,682	2,270	1,200	0	0	0	0	0

18 Following the authorisation of the third OTF (Tradition España OTF) at the end of September.

Gross fixed income issues of Spanish issuers *(continued)* TABLE 7

Registered abroad

					2021			
	2018	**2019**	**2020**	**2021**	**I**	**II**	**III**	**IV**[2]
NOMINAL AMOUNT (millions of euros)	**87,846**	**100,321**	**90,201**	**116,522**	**31,200**	**31,261**	**25,307**	**28,754**
Long-term	36,913	53,234	46,122	56,892	16,504	16,604	10,787	12,997
Preferred shares	2,000	3,070	1,850	3,820	500	1,570	1,000	750
Subordinated bonds	2,250	1,755	0	600	0	600	0	0
Bonds	32,663	48,409	44,272	51,722	16,004	14,434	9,787	11,497
Securitisation bonds	0	0	0	750	0	0	0	750
Short term	50,933	47,087	44,078	59,630	14,696	14,657	14,520	15,758
Commercial paper	50,933	47,087	44,078	59,630	14,696	14,657	14,520	15,758
Securitised assets	0	0	0	0	0	0	0	0

***Pro memoria*: gross issues of subsidiaries of Spanish companies in the rest of the world**

					2021			
	2018	**2019**	**2020**	**2021**	**I**	**II**	**III**	**IV2**
NOMINAL AMOUNT (millions of euros)	**92,600**	**92,342**	**71,048**	**66,644**	**21,090**	**16,149**	**14,216**	**15,189**
Financial institutions	43,549	57,449	42,120	38,347	10,696	9,672	8,922	9,057
Non-financial companies	49,051	34,893	28,928	28,297	10,394	6,477	5,294	6,132

Source: CNMV and Bank of Spain.

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

2 Data until 30 November.

3 Equity markets

3.1 Prices and returns

The main international equity indices behaved somewhat irregularly throughout the last quarter of the year, with increases in the first half of the quarter and subsequent falls, influenced by the worsening of the health situation. Even so, these declines were less than the initial increases, so quarterly revaluations were recorded in most of the indices, with the exception of the Ibex 35 and the Asian indices, where there were falls of close to 1% and 2%, respectively. The US indices experienced the most pronounced rises: the increase in the S&P 500 stood out (10.6%), followed by the Nasdaq Composite and the Dow Jones (with revaluations of 8.3% and 7.4%, respectively). For their part, the European indices increased by between 4.1% for the Dax 30 and 9.7% for the Cac 40.

Performance of the main stock market indices[1]

TABLE 8

%

	2018	2019	2020	2021	Mar-21	Jun-21	Sep-21	Dec-21
World								
MSCI World	-10.4	25.2	14.1	20.1	4.5	7.3	-0.4	7.5
Euro area								
Eurostoxx 50	-14.3	24.8	-5.1	21.0	10.3	3.7	-0.4	6.2
Euronext 100	-11.2	24.9	-3.6	23.4	8.3	5.8	0.9	6.7
Dax 30	-18.3	25.5	3.5	15.8	9.4	3.5	-1.7	4.1
Cac 40	-11.0	26.4	-7.1	28.9	9.3	7.3	0.2	9.7
Mib 30	-16.1	28.3	-5.4	23.0	10.9	1.8	2.3	6.5
Ibex 35	-15.0	11.8	-15.5	7.9	6.3	2.8	-0.3	-0.9
United Kingdom								
FTSE 100	-12.5	12.1	-14.3	14.3	3.9	4.8	0.7	4.2
United States								
Dow Jones	-5.6	22.3	7.2	18.7	7.8	4.6	-1.9	7.4
S&P 500	-6.2	28.9	16.3	26.9	5.8	8.2	0.2	10.6
Nasdaq-Cpte	-3.9	35.2	43.6	21.4	2.8	9.5	-0.4	8.3
Japan								
Nikkei 225	-12.1	18.2	16.0	4.9	6.3	-1.3	2.3	-2.2
Topix	-17.8	15.2	4.8	10.4	8.3	-0.5	4.5	-1.9

Source: Refinitiv Datastream.

1 In local currency. Data up to 31 December.

For the year as a whole, trends in the main stock market indices (see Table 8) show notable increases in all regions. Most of the indices trended upwards throughout the year, especially in the first quarter. In Europe, the annual stock market advances were between 15.8% (FTSE 30) and 28.9% (Cac 40), except for the Ibex 35, which showed the most modest revaluation of this group (7.9%). In the United States, increases of between 18.7% for the Dow Jones and 26.9% for the S&P 500 were observed, while in Japan the increases were 4.9% for the Nikkei 225 and 10.4% for the Topix

In Spain, the Ibex 35 ended the last quarter of 2021 down by 0.9% after posting two consecutive quarters of declines, ranking as the worst performing major European reference index.[19]

Prices on Spanish equity markets began the fourth quarter with new increases, favoured by positive corporate earnings and the good performance of international markets. The markets temporarily relaxed their fears about the effects of higher commodity prices and interruptions in supply chains on companies' earnings.

19 The other European reference indices all posted gains in the fourth quarter (see Table 8). Internationally, only the Japanese indices showed declines.

However, the situation became more complex at the end of November, when the appearance of a new variant of the virus, *omicron*, was announced in South Africa. This caused new falls in the markets, deriving not only from fears of the introduction of new restrictions in Europe, but also from the intensification of problems in supply chains and the possible acceleration of the withdrawal of central banks' stimulus measures in the face of the strong advance in inflation.[20] However, the markets recovered most of the falls in the quarter in the last sessions of the year, after it was confirmed that the new variant of the virus was less damaging than initially feared.

For the year as a whole, the Ibex 35 registered a revaluation of 7.9%, below that of the other indices, in an environment of continued volatility at moderate levels and declines in trading volumes. The advance of the Ibex 35 in 2021 was insufficient to offset the annual losses accumulated in 2020 (-15.5%) and places the value of the index at the end of the year (8,700 points) at levels similar to those existing in mid-2019.

By sectors, the uncertainties present in the markets in the final stretch of the year meant that most of them showed negative behaviour in the last quarter, with differences in intensity among sectors and among the companies in each sector. Prices of small and mid-cap companies performed better than those of the Ibex 35, although in the case of smaller companies – which in previous years had performed relatively better than most due to being oriented towards more innovative sectors such as those based on energy from renewable sources –, a rather slight revaluation was observed in the year as a whole, due to the effects of the regulatory measures adopted in the energy sector (see Table 9).

In the last quarter of the year, the biggest downturns were concentrated in companies in the consumer goods and services sectors, particularly airlines and textile companies due to the impact of potential restrictions on mobility, as well as the banks and the main oil company (Repsol), whose activity could be penalised by a scenario of a slower recovery and lower demand for oil. In the case of banks, the falls in prices may be associated with a scenario of less intense recovery in activity and a possible increase in NPLs. The declines in pharmaceutical companies and, to a lesser extent, of companies in the telecommunications sector, insurance companies and real estate companies also stood out.

Turning to earnings, the most positive behaviour corresponded to the electricity and gas companies, favoured by the relaxation of the regulatory measures established in previous quarters,[21] as well as companies related to basic materials, manufacturing and construction, which are driven by the high prices of raw materials and the good prospects of the real estate market. Also noteworthy is the positive behaviour of hotel and tourism companies, which responds to the progressive recovery of their activity, as well as technology companies (Amadeus), closely linked to the prospects of the tourism sector.

20 In November, Spain's inflation reached 5.5% year-on-year, its highest level since 1992, while in the euro area as a whole it stood at 4.9%, the highest rate in the historical series. Likewise, in the United States it reached 6.8%, its highest level since 1982.

21 The government approved a royal decree-law that reduces the extra remuneration of nuclear, hydroelectric and renewable power plants deriving from the rise in prices of gas and of CO_2 emission rights.

Performance of Spanish stock market indices TABLE 9

%

	2018	2019	2020	2021	Mar-21	Jun-21	Sep-21	Dec-21
Ibex 35	-15.0	11.8	-15.5	7.9	6.3	2.8	-0.3	-0.9
Madrid	-15.0	10.2	-15.4	7.1	6.2	2.3	0.9	-0.6
Ibex Medium Cap	-13.7	8.4	-9.7	8.6	8.3	0.4	-2.6	2.6
Ibex Small Cap	-7.5	11.9	18.9	1.8	9.3	-0.4	-6.4	-0.1
FTSE Latibex All-Share	10.3	16.3	-22.0	5.8	-2.1	24.1	-15.4	2.9
FTSE Latibex Top	14.8	15.3	-19.1	13.5	1.3	22.1	-7.4	-0.9

Source: Refinitiv Datastream.

The evolution of the prices of the equities of the sectors that make up the General Index of the Madrid Stock Exchange (IGBM) shows a scenario of slow recovery with somewhat divergent behaviour among the different sectors. With the exception of the energy sector, all of them began the first quarter with an upward trend, which was consolidated, to a greater or lesser extent, as new data became known. The more cyclical sectors generally showed a faster recovery, except in some of them, such as transport and tourism, whose evolution was more modest as they were more affected by the health situation.

In the year as a whole, the revaluation of the financial sector (20.7%) and, to a lesser extent, of real estate services companies (13%) stood out thanks to the revaluation of the prices of their assets. Financial entities were favoured by the scenario of economic recovery and the lifting of restrictions on the distribution of dividends, as well as by the prospects of a premature and progressive tightening of monetary policy, which would allow their margins to be increased. The two large banks, which have been accumulating significant declines since 2018 – except for a discreet behaviour in 2019 –, presented a notable revaluation in 2021 (see Table 10). The revaluation of companies in the technology and telecommunications sector also stood out (9%), as did that of those in the raw materials, manufacturing and construction sector (9.3%). The former was a consequence of the significant recovery of the main telecommunications operator (Telefónica), although its market capitalisation is still only just over half what it was just three years ago; while the latter benefited from the high prices of raw materials and the reactivation of the construction sector. For its part, the consumer goods sector showed hardly any changes (0.9%), as the positive evolution of the main company in the textile sector (Inditex) made it possible to offset the falls in the pharmacy and food subsectors.

On the side of annual losses, the drop in the energy sector stood out (-1.6%), after successive exercises of continuous advances.[22] Likewise, the consumer services sector also experienced a drop in quoted prices for the second consecutive year, since its activity has continued to be affected by the effects of the pandemic, especially in the case of airlines. Within this consumer services sector, it is worth highlighting the revaluation, not only in the fourth quarter, but in the year as a whole, of leisure, tourism and hospitality companies (see Table 10).

22 The energy sector was the only one that presented a positive evolution (5%) in the 2020 financial year.

Returns of sectors and of the main stocks[1] on the Madrid Stock Exchange TABLE 10

	Weighting[2]	2020	2021	II 21	III 21	IV 21
Financial services	**27.49**	**-26.4**	**20.3**	**10.0**	**3.0**	**-7.5**
Banking	25.99	-27.5	20.7	10.0	3.0	-7.5
BBVA	7.68	-19.0	30.1	18.1	9.3	-8.2
CaixaBank	3.07	-25.0	14.9	-1.7	3.6	-10.1
Santander	13.66	-29.0	15.9	11.1	-2.6	-6.2
Real estate services	**1.58**	**-32.1**	**13.0**	**1.4**	**1.6**	**1.9**
Oil and energy	**24.45**	**5.0**	**-1.6**	**-4.1**	**-8.7**	**14.1**
Iberdrola	14.53	32.8	-7.5	-6.4	-13.4	19.9
Repsol	3.55	-35.3	26.5	-0.1	7.0	-7.6
Basic mats., industry and construction	**10.72**	**-2.5**	**9.3**	**-1.3**	**-0.7**	**6.2**
Construction	5.67	-16.3	15.2	-2.1	3.9	9.1
Ferrovial	3.13	-14.6	24.3	12.2	1.9	10.5
Technology and telecommunications	**16.01**	**-21.9**	**9.0**	**4.3**	**-0.5**	**-1.3**
Cellnex	5.36	37.3	12.5	18.1	-0.7	**-4.0**
Telefónica	4.89	-42.7	29.5	8.4	2.7	-1.2
Amadeus IT	5.23	-18.2	0.1	-1.8	-4.1	4.9
Consumer goods	**13.88**	**-15.3**	**0.9**	**4.0**	**2.3**	**-10.1**
Inditex	9.06	-17.2	9.6	5.7	7.1	-10.3
Consumer services	**5.82**	**-36.7**	**-1.9**	**-4.8**	**3.8**	**-10.2**

Source: Refinitiv Datastream, Madrid Stock Exchange and BME (Spanish Stock Markets & Financial Systems).

1 Securities with a weighting in the IGBM of over 3% in terms of market capitalisation adjusted by the percentage of free float.

2 Relative weight (%) in the IGBM from 1 July 2021.

In 2021 almost 60% of stocks posted a positive return, which in most cases was above 10%. Of these, 16 stocks appreciated by more than 25%, with the majority concentrated in the commodities, industrials, construction and financials sectors.

However, as usual, capitalisation remains concentrated in a small number of large stocks, so only a few companies (forming part of the Ibex 35) once again had a significant impact on the annual variation of the index (more than 0.3 of a percentage point (pp) in absolute value). Ten companies had a positive impact greater than 0.3 pp[23] (see Table 11). Only one of them had also had a significant positive impact in the previous year (the telecommunications company Cellnex), while most of the large Spanish companies by capitalisation (including the major banks and telecommunications, oil and textile companies) rejoined the list in 2021 after being absent from it in 2020 due to downturns in their stock prices. The number of companies with a negative impact of more than 0.3 pp was only three, most notably including the main Spanish electricity company (Iberdrola), which had accumulated several successive years of significant revaluations.

23 In 2020, the number of companies with a positive impact on the index greater than 0.3 pp in absolute terms was just four, while the number of companies with a negative impact of more than 0.3 pp was 14.

Securities with the greatest impact on IGBM variation[1] TABLE 11

Security	Sector	Dec-2021 Impact on variation of the IGBM (pp)
Positive impact		**vs Dec-20**
Banco Santander	Financial services	1.87
BBVA	Financial services	1.78
Telefónica	Technology and telecommunications	1.11
Inditex	Consumer goods	0.79
Repsol	Oil and energy	0.74
Ferrovial	Basic mats., industry and construction	0.61
Cellnex	Technology and telecommunications	0.60
Naturgy	Oil and energy	0.52
CaixaBank	Financial services	0.40
Fluidra	Basic mats., industry and construction	0.32
Negative impact		
Iberdrola	Oil and energy	-1.18
Siemens-Gamesa	Basic mats., industry and construction	-0.80
Grifols	Consumer goods	-0.59

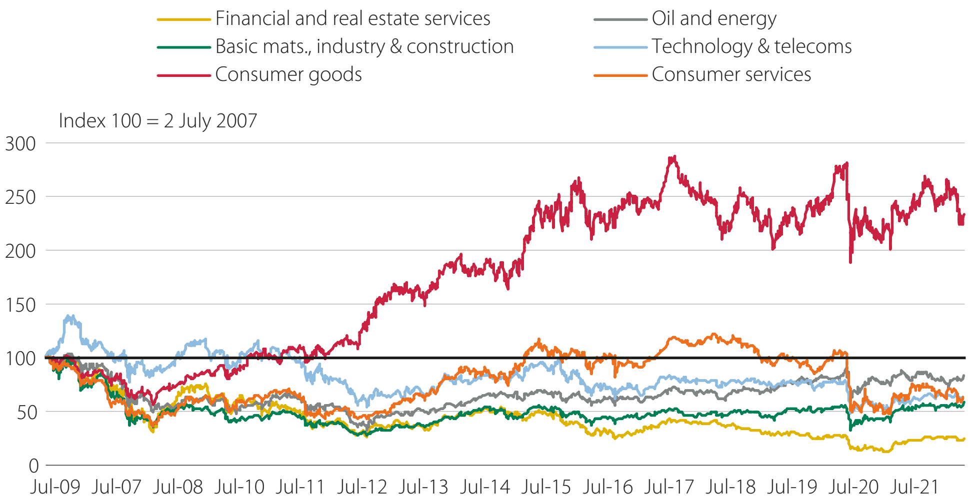
Source: Refinitiv Datastream and Madrid Stock Exchange. Data up to 31 December.

1 Includes the securities with the greatest impact (absolute value equal to or greater than 0.3 pp) on the annual variation of the IGBM. Furthermore, all securities that were not excluded or suspended from trading at the close of the period considered are taken into account.

Trends in quoted prices in the various economic sectors present interesting prospects when considered from a longer term point of view. As can be seen in Figure 10, quoted prices in all sectors, with the exception of consumer goods, remain below the values prior to the start of the 2007 financial crisis. The most significant changes in 2021 correspond to advances in the financial and real estate sector, as well as in the raw materials, manufacturing and construction sector. Despite this, the financial and real estate sector remains the worst performing sector over the past ten years and is still far from recovering its 2007 value. The oil and energy sector, despite the slight decline in 2021, is the closest to recovering its value prior to the financial crisis.

In 2021, the effects of the crisis continued to have a significant effect on the capitalisation of Spanish companies and the value of the country's productive structure, although progress in economic reactivation and the normalisation of the situation have allowed the recovery of a large part of the capitalisation of many companies in traditional sectors such as banks, manufacturing, traditional telecommunications companies and energy companies. Apart from this, although the value structure prior to the pandemic is recovering to a large extent, new sectors and companies in the technology and renewable energy sectors are gaining ever more weight, benefiting from their greater ability to operate in and adapt to the new competitive environment. Furthermore, many of the large traditional companies have also been able to maintain their relative importance, having successfully undertaken digitisation and technological transformation processes to adapt to the new competitive environment.

Sector performance on the Madrid Stock Exchange FIGURE10

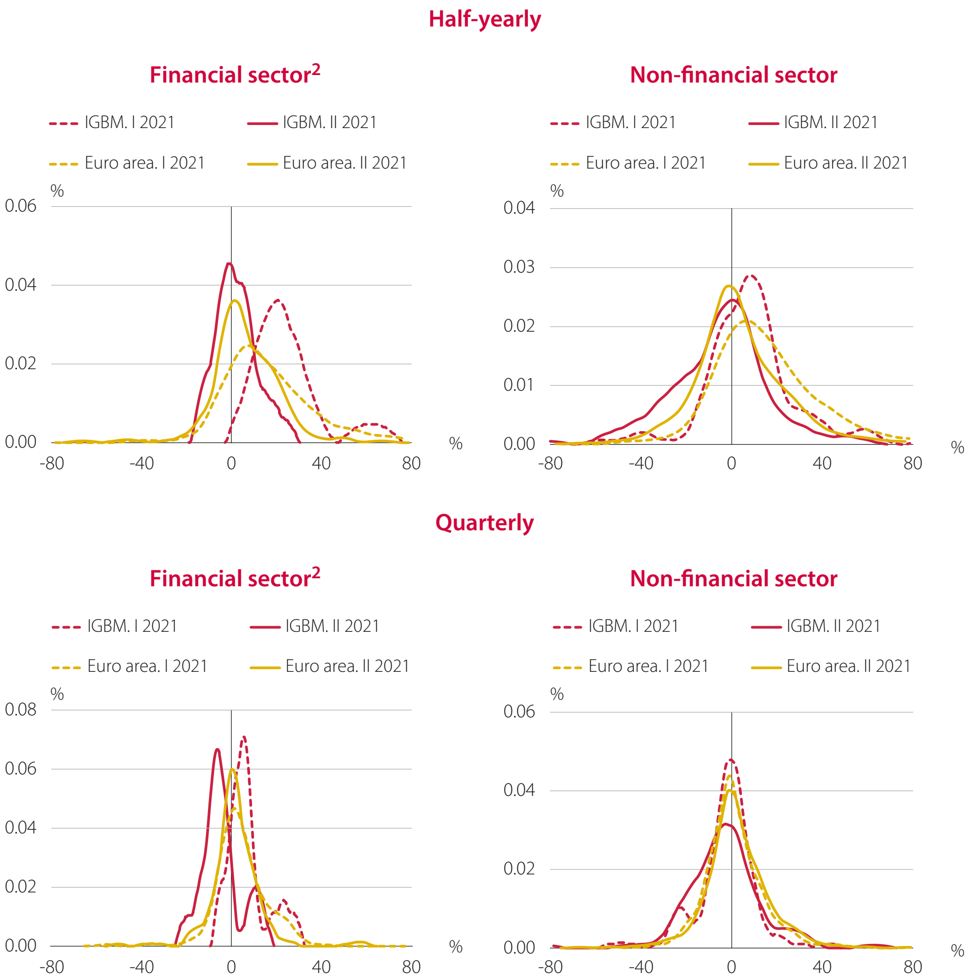


Source: Refinitiv Datastream. Data up to 31 December.

The distributions of the returns of the Spanish and European listed companies reflect the evolution of these markets throughout the year described, with a somewhat worse behaviour for Spanish companies, especially in the last quarter of the year. Thus, the results of the first half of the year show a significant recovery in company prices, which began in the last quarter of 2020, while in the second half in general terms this growth stagnated. However, some important differences can be observed between the Spanish economy and the rest of Europe: Spanish companies belonging to the financial sector obtained higher returns than their European counterparts in the first half of the year, since all of them appreciated by more 10%, whereas in the euro area as a whole only 53% of the entities did so. In contrast, in the second half of the year the opposite was observed, with only 18% of Spanish financial institutions exceeding 10% revaluation compared with 33% of European ones (see upper panels of Figure 11).

The behaviour of Spanish non-financial companies belonging to the IGBM was also somewhat more unfavourable than that of companies in the euro area as a whole in both halves of the year. Thus, in the first half, despite the fact that in both economies the percentage of companies with negative returns was not very different (23% in Spain compared to 28% in the euro area), those that experienced revaluations of more than 20% were much less numerous, in relative terms, in the case of the IGBM, with around 20% compared to 32% for the euro area. The second half also saw a better performance at the European level than at the national level, with 57% of IGBM-listed companies posting negative returns versus 44% in the euro area.

Distribution of the variation of share prices[1] FIGURE 11



Source: Madrid Stock Exchange and Refinitiv Datastream.

1 The analysis is performed on the companies that make up each of the indices at the end of 2021. At that date, the Spanish IGBM stock index comprised 116 companies admitted to trading and the euro area stock index included 1,342 companies.

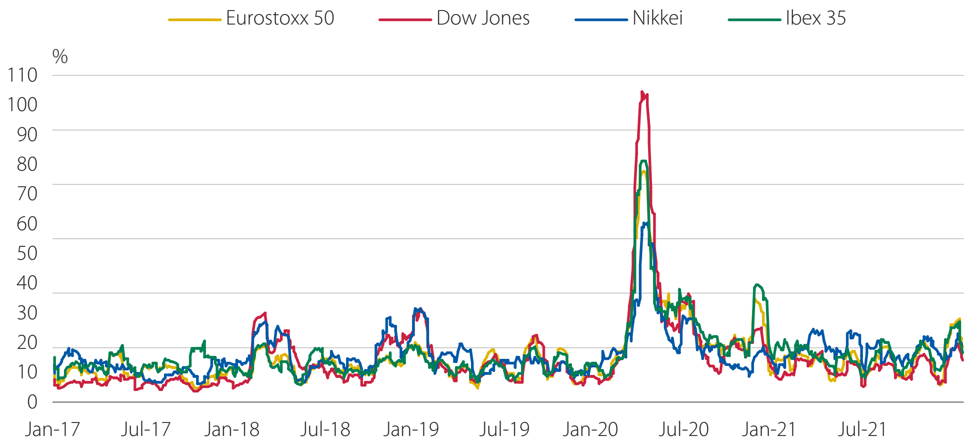
2 The financial sector includes credit institutions, insurers, portfolio and holding companies and other investment service providers. In Spain, there are 11 companies (10% of the total number of companies in the index), and in the euro area there are 211 companies (16% of the total).

An analysis of the distribution of returns in the last two quarters of the year reveals few differences between them in the case of non-financial companies, while for companies in the financial sector the distribution of the fourth quarter shows worse returns than that of the third, this difference being much more pronounced in the case of the IGBM. Thus, only 18% of IGBM financial institutions presented a negative return in the last three months of the year, compared with 77% in the previous quarter, while this proportion was 30% and 45%, respectively, for euro area financial institutions. For its part, the distribution of the returns of non-financial companies was, as has been mentioned, much more even in both quarters: just under 60% of all Spanish companies and around 50% of euro area companies posted negative returns in both quarters (see lower panels of Figure 11).

3.2 Volatility

The historical volatility measures of the most significant stock market indices did not experience significant changes during the year, contrary to what occurred in 2020 (see Figure 12). The highest levels of volatility in 2021 were observed in the first and fourth quarters of the year, although, in any case, they were much lower than those of 2020. The annual volatility of the Ibex 35 and the Eurostoxx 50 was 15% on average, with year-end values being somewhat higher (around 16% and 18%, respectively). For its part, the volatility of the Dow Jones remained relatively stable and close to 12% during the year, ending it at around 14%. Regarding the implied volatility measures of the most significant stock indices, annual averages of between 15% and 18% were observed, except for the technological Nasdaq, volatility of which was higher.

Historical volatility of main stock market indices FIGURE 12



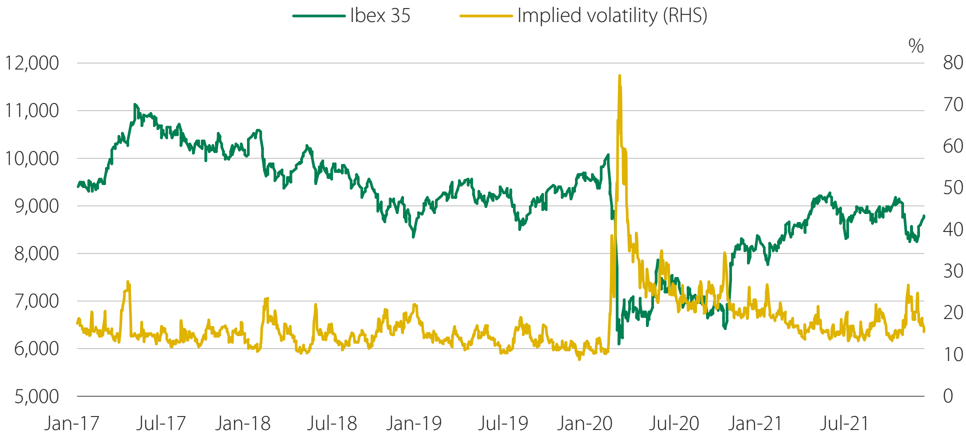
Source: Refinitiv Datastream. Data up to 31 December.

In the case of the Ibex 35, the historical volatility value increased again in the fourth quarter (18.05%) for the second consecutive quarter, after the decreases observed in the first half of the year. This new rise in volatility once again moved its value away from the historical low zone –close to 10% – observed at the end of 2019 (see Figure 13).

The annual average of this indicator in 2021 was 15.9%, almost half the value reached in 2020 (28.4%), when it was at its highest level in the last decade, but above the annual averages from previous years.[24] Volatility in the year moved in a relatively narrow range of barely 20 pp and its maximum level was only just over 25%. The behaviour of the volatility of the Spanish market is in line with that observed in other large European and US stock markets.

24 The historical volatility of the Ibex 35 reached averages of 12.3% and 15.1% in 2019 and 2018 respectively.

Performance of the Ibex 35 and implied volatility[1] FIGURE 13



Source: Refinitiv Datastream and MEFF. Data up to 31 December.

1 At-the-money (ATM) implied volatility of the first maturity.

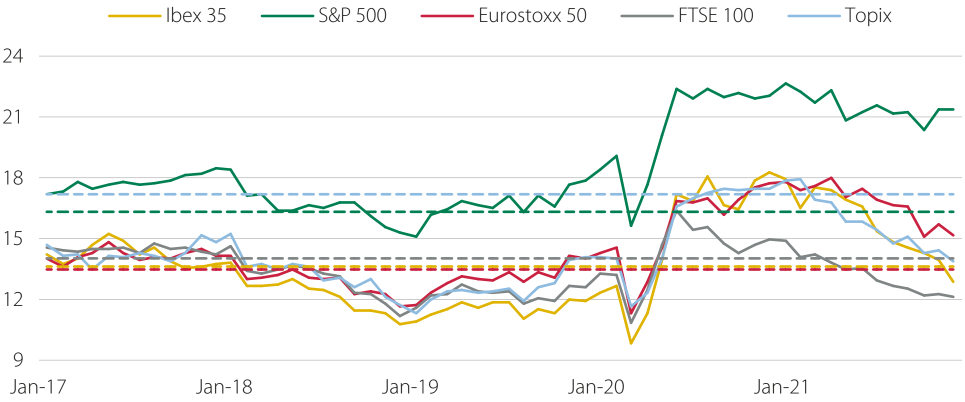
3.3 Dividend yield and PER

Dividend yields behaved unevenly among the main indices. Both slight increases (e.g. the Topix and the Mib 30) and falls (Ibex 35) were observed with respect to the previous year.

In general, dividend yields continued to be higher in European indices than in US or Japanese ones (with the exception of the Euronext 100 index). Thus, at the end of December the dividend yield of the S&P 500 index stood at 1.7% (compared with 2% at the end of 2020), while the average dividend yield for European indices was 2.7% in December (2.8% at the end of 2020 and 3.6% in 2019). In the set of European indices, the most significant drop was observed in the Ibex 35, whose dividend yield went from 4.2% in 2020 to 3% in 2021; although other indices also showed decreases (this was the case of the Dax 30 and the FTSE 100, with decreases of 0.4 pp, to 2.2%, and 0.2 pp, to 3.5%, respectively). The Italian Mib 30 index showed the greatest increase in the year (+0.8 pp, to 3.3%), followed by the Euronext 100 and the Cac 40.

The price/earnings ratios (PERs) per shares of the main equity indices fell in 2021 compared to December 2020 (see Figure 14). The decreases in these ratios are explained by the progressive recovery of expected corporate profits. At the end of 2021, the greatest decreases in the PER ratio were observed in the European indices: they ranged from 1.4 (Dax 30) to 5.8 times (Ibex 35-), which increased their difference with respect to the much higher ratios of the US indices. The PER ratio ended the year at 21.3 times in the S&P 500 index, well above the records in Europe, which ranged between 12.1 (FTSE 100) and 15.9 (Euronext 100) and in Japan (13.6). As can be seen in Figure 14, only the S&P 500 and the Eurostoxx 50 showed PERs above their historical averages at the end of 2021.

PER[1] of the main stock market indices FIGURE 14



Source: Refinitiv Datastream. Data for the last session of each month. Data up to 31 December.

1 Earnings per share in the denominator of this ratio are based on 12 month forecasts. The dotted lines represent historical averages for each index since 2000.

In Spain, the PER of the Ibex 35 gradually decreased throughout the year, from 17.9 times in January to 12.9 at the end of the year – its lowest value in the year. In a context of price increases in the equities, the decline in the PER is explained, as previously indicated, by the progressive recovery of expected business profits over the course of the year. In the last quarter, it fell from 14.5 to 12.9, since the slight fall in quoted prices was combined with the continued expansion of forecast corporate profits. At the end of the year, with the exception of the UK market, which had an even lower ratio, the Spanish market presented the lowest PER among the main markets in our environment and the most prominent international benchmark indices (see Figure 14).

3.4 Activity: trading, issues and liquidity

In 2021 (see Table 12), trading volumes[25] of the main stock exchanges and multilateral trading facilities (MTFs) grew in both the United States and Japan, while on European platforms trading data were more uneven(see Table 12).

In the United States, the increase in total trading was 5%, with the most important advances being those recorded by Nasdaq OMX and Cboe Global Markets (8% and 7%, respectively).[26] In Japan, trading increased by 3% in 2021. In Europe, trading fell in several trading centres, most notably in the case of the London stock exchange (-28%). The second and third biggest declines in trading were on the Spanish Stock Markets and Financial Systems (BME) (-13%) and the Deutsche Börse (-7%). In contrast, Euronext saw an increase in volumes (until November) of 14%, as did Cboe Equities Europe (7%). Similarly, the Turquoise MTF advanced by 7% in its trading activity until November.

25 According to data published by the World Federation of Exchanges (WFE) and the Federation of European Stock Exchanges (FESE).

26 Trading figures on the US stock exchanges are possibly underestimated, since the NYSE data for the last quarter of 2021 are not available.

Trading volumes on the main international stock exchanges

TABLE 12

Billions of euros

	2018	2019	2020	2021[1]	Mar-21	Jun-21	Sep-21	Dec-21[1]
Market operator								
United States[2]	44,222	36,874	61,492	64,582	16,957	15,586	15,482	16,557
Nasdaq OMX	14,250	14,210	21,840	23,553	6,194	5,370	5,414	6,576
NYSE[3]	16,397	10,918	22,991	23,265	5,904	6,040	5,912	–
Cboe Global Markets	13,575	11,747	16,661	17,764	4,859	4,176	4,156	4,572
Japan Exchange Group	5,327	4,542	5,399	5,555	1,447	1,276	1,363	1,470
London Stock Exchange Group[4]	2,143	1,784	1,837	1,320	466	291	274	288
Euronext[5]	1,865	1,713	2,193	2,493	555	582	644	713
Deutsche Börse	1,538	1,344	1,812	1,686	489	393	377	427
BME[6]	591	470	429	375	94	93	80	109
Cboe Equities Europe[7]	2,377	1,667	1,462	1,568	370	365	376	457
Multilateral trading facility (MTF)								
Turquoise	621	299	286	306	85	87	81	53

Source: World Federation of Stock Exchanges, European Federation of Stock Exchanges and CNMV.

1 Data to 31 December, except for Euronext and Turquoise, where they are to 30 November.

2 Since 2009, the sum of the Nasdaq OMX, the New York Stock Exchange (NYSE) and Cboe Global Markets (formerly BATS) has been used.

3 Q4 2021 data are not available, so the 2021 annual figure includes Q4 2020 trading data for comparison purposes.

4 Includes the London Stock Exchange and Borsa Italiana.

5 Includes Belgium, the Netherlands, France, Portugal, Ireland and Euronext London.

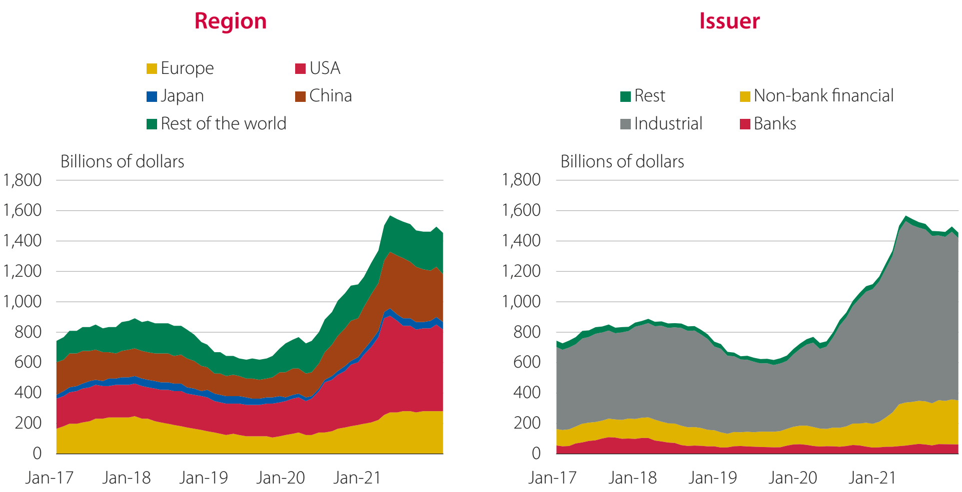
6 Bolsas y Mercados Españoles. Does not include Latibex.

7 BATS Europe until February 2017, when it was acquired by the Cboe Global Markets group.

Equity issues in international financial markets (see Figure 15) increased by 24.6% compared to 2020, reaching US$1.45 trillion for the year ended 31 December 2021. Annual advances were observed in all the regions considered, particularly Europe, where issues increased by 40.1% to reach US$280 billion, and the United States, where they increased by more than US$90 billion, to US$539 billion in one year. In Japan and China, the increase in equity issues compared with 2020 was notable but lower (11.2% and 13.8%, to US$44.10 billion and US$320.30 billion respectively). There were increases in equity issues in all sectors, especially the non-banking financial sector (72.7%) and the banking sector (45.3%). Industrial companies and utilities issued 15.6% and 7.4% more, respectively, the former being the most important in absolute value.

International equity issues

FIGURE 15



Source: Dealogic. Accumulated data for 12 months up to 31 December.

Trading in Spanish equities recovered again in the last quarter of the year, as usually happens at year-end closings, although it was 1.3% below that reached in the same quarter of 2020. This decrease was due exclusively to the 5% decrease in trading volumes in centres other than the Spanish regulated market, since in the latter (BME) there was a year-on-year increase of 1.9%.

For the year as a whole the volume of Spanish securities traded reached just over €690 billion, 11.6% less than in 2020 and the lowest figure since 2004. Therefore, the trend of falling trading volumes in Spanish equities continues, a circumstance that also occurs, to a lesser extent, in some other European markets.[27] Of the total amount, slightly more than €365 billion corresponded to the Spanish regulated market (12.7% less), which reached the lowest volume since 1999, while €325 billion (10.2% less) corresponded to competing trading venues.

27 See Table 12.

Trading in Spanish equities admitted to trading on Spanish stock exchanges[1]

TABLE 13

Millions of euros

	2018	2019	2020	2021	II 21	III 21	IV 21
Total	**930,616.1**	**805,833.0**	**780,343.5**	**690,205.8**	**169,201.6**	**150,830.9**	**192,056.5**
Admitted to SIBE electronic platform	930,607.1	805,826.6	780,341.0	690,198.4	169,199.0	150,830.5	192,054.8
BME	579,810.4	460,267.4	418,512.6	365,170.2	90,282.5	77,726.6	105,892.4
Cboe Equities[2]	278,361.0	256,772.5	275,682.4	238,466.3	55,259.9	54,457.9	66,305.7
Turquoise	42,883.4	30,550.6	23,242.2	23,101.3	5,981.7	5,549.7	5,476.8
Other	29,552.2	58,236.1	62,903.8	63,460.6	17,674.9	13,096.3	14,379.9
Open outcry	8.2	6.2	2.5	7.4	2.6	0.4	1.6
Secondary market	0.8	0.1	0.0	0.0	0.0	0.0	0.0
Pro memoria							
Trading of foreign equities on BME	3,517.1	3,480.5	4,273.8	4,343.6	1,061.9	1,106.5	1,118.3
BME MTF Equity[3]	4,216.3	4,007.7	3,929.0	3,536.5	815.2	639.8	1,110.4
Latibex	151.6	136.6	79.5	48.8	8.1	7.9	21.7
ETFs	3,027.6	1,718.0	2,551.1	1,549.0	345.3	404.5	398.7
Total trading on BME	590,732.0	469,616.6	429,348.5	374,655.6	92,515.6	79,885.7	108,543.1
Spanish equities on BME as % of total Spanish equities	62.6	57.4	53.9	53.3	53.7	51.9	55.5
Systematic internalisers[4]	**143,956.9**	**141,308.3**	**144,694.4**	**48,469.9**	**11,077.5**	**10,759.6**	**11,490.6**

Source: Bloomberg and own compilation by the authors.

1 This includes the trading of Spanish equities subject to market rules or MTF (lit plus dark). Spanish equities on Spanish stock exchanges are those with a Spanish ISIN that are admitted to trading on the regulated market of Bolsas y Mercados Españoles (BME), i.e., not including the Alternative Stock Market (MAB). Foreign equities are those admitted to trading on the regulated BME market with an ISIN that is not Spanish.

2 Includes trading that until 2020 was carried out through Chi-X and BATS, which moved to Amsterdam in January 2021 as a result of Brexit.

3 Called MAB (Alternative Stock Exchange) until September 2020. This MTF has three segments: BME Growth (on which growth companies and Spanish real estate investment funds are listed), BME IIC (on which open-ended collective investment companies (SICAVs) and hedge funds are listed) and BME ECR (on which venture capital firms are listed).

4 Data estimated by the CNMV with data from transaction reporting.

The distribution of trading in Spanish securities between BME and the rest of the trading venues favoured BME in the final stretch of the year due to its better performance in this period, although this was not the case for the year as a whole. In the fourth quarter, BME accounted for 55.5% of total trading of Spanish securities subject to non-discretionary market rules (51.9% in the third quarter). However, in the cumulative figure for the year, this proportion stood at 53.3%, approximately 0.6 pp less than in 2020.

All the same, a certain stabilisation of market shares of these venues seems to be observed over the last two years, despite the fact that for some specific securities the trading carried out in other trading centres continues to be much higher than on the national regulated market. Thus, the proportion traded on BME varies each quarter between 52% and 57% of the total while that of the competing centres does so between 43% and 48%.[28]

28 The annual market share of the competing markets was 46.1%, 42.6% and 37.4% of trading subject to non-discretionary market rules in 2020, 2019 and 2018, respectively.

Regarding the fragmentation of trading at European level, a certain stability was also observed in 2021, such that trading carried out in trading venues other than regulated markets remained somewhat below 40% in Europe as a whole. This situation, which at first could have been partially attributed to Brexit, due to the diminished incentive to trade in the United Kingdom, where a large part of the regulated markets' competing centres were initially located, remained unchanged in this past year, during which these competing centres established fully operational subsidiaries in the European Union.

Regarding the composition of the trading of Spanish shares abroad, Cboe Global Markets (Cboe), which since Brexit has been operating from Amsterdam, maintained its privileged position in the fourth quarter, registering a trading volume of more than €66.30 billion, which represents almost 63% of the volume traded on BME. Its cumulative volume for the year was notable, close to €238.50 billion, but 13.5% less than in 2020, making it the operator with the sharpest decline. This annual figure represents 73.4% of the total amount traded abroad, compared with 76% the previous year and its lowest level in the last four years. For its part, Turquoise slightly improved its market share to 7.1%, after several successive years of declines, while the rest of the operators as a whole and for the third consecutive year again registered a slight increase in both the traded volume and their market share, which grew to 19.5% (see Table 13).

Likewise, trading carried out by systematic internalisers in the last quarter and for the year as a whole was below 7% of the total trading of Spanish securities (defining total trading as the sum of trading subject to non-discretionary market rules and that carried out by systematic internalisers). This proportion, which represents less than half of what has been observed with some stability since 2019, maintained a declining trend for most of the year, which, if consolidated, would represent a significant advance in fulfilling one of the objectives of the MiFID II regulations, which was to shift part of the trading that currently takes place without being subject to non-discretionary market rules to trading centres that are subject to such rules.

The volume of equity issues made in the national markets in 2021 as a whole was significant and reached €14.94 billion, 37.6% more than in the previous year and the highest amount since 2017. This despite the fact that the volume was very low in the fourth quarter of the year, standing at €322 million, the lowest in a quarter in recent years (see Table 14).

Even so, the volume of issues in 2021 as a whole was significant and reached €14.94 billion, 37.6% more than in the previous year and the highest amount since 2017. This progress was supported, to a great extent, by the growth of capital increases with a non-monetary counterpart and other types of transactions. Also, the IPO of Acciona Energía took place during the year, the first IPO in the Spanish market since 2018, as well as the IPOs of Grupo Ecoener and Línea Directa in the form of a public subscription offer (OPS) and a listing, respectively.

Capital increases and IPOs

TABLE 14

	2019	2020	2021	I 21	II 21	III 21	IV 21
NUMBER OF ISSUERS[1]							
Total	**33**	**38**	**44**	**10**	**10**	**16**	**8**
Capital increases	33	38	43	10	10	15	8
Public offering (for subscription of securities)	1	1	1	0	1	0	0
Initial public offering (IPO)	0	0	1	0	0	1	0
NUMBER OF ISSUES[1]							
Total	**52**	**38**	**52**	**10**	**14**	**19**	**9**
Capital increases	52	38	51	10	14	18	9
Public offering (for subscription of securities)	1	1	1	0	1	0	0
Initial public offerings[2] (IPOs)	0	0	1	0	0	1	0
EFFECTIVE AMOUNT[1] **(millions of euros)**							
Capital increases with fund-raising	**8,240.6**	**8,903.1**	**13,673.0**	**2,196.7**	**8,752.8**	**2,567.4**	**156.2**
With pre-emptive right	4,729.8	6,837.2	7,060.4	0.0	7,032.8	6.3	21.2
No pre-emptive right	10.0	150.1	100.0	0.0	100.0	0.0	0.0
Accelerated placements	500.0	750.0	0.0	0.0	0.0	0.0	0.0
Capital increases with non-monetary consideration[3]	2,034.2	233.0	3,525.3	2,079.2	56.0	1,390.1	0.0
Capital increases via conversion	354.9	162.4	109.5	0.0	68.0	41.4	0.0
Other	611.8	770.3	2,878.1	117.5	1,496.0	1,129.6	135.0
Bonus share issues[4]	**1,565.4**	**1,949.0**	**1,264.9**	**772.5**	**195.8**	**131.1**	**165.5**
Of which, scrip dividends	1,564.1	1,949.0	1,243.6	772.5	195.8	131.1	144.2
Total capital increases	**9,806.0**	**10,852.1**	**14,938.1**	2,969.2	8,948.7	4,898.8	321.7
Initial public offerings	**0.0**	**0.0**	**2,200.2**	**0.0**	**0.0**	**2,200.2**	**0.0**
Pro memoria: **transactions on the MAB**[5]							
Number of issuers	12	13	60	9	11	26	14
Number of issues	17	14	77	11	15	32	19
Cash amount (millions of euros)	298.3	238.0	2,441.0	83.2	692.3	1,230.6	434.7
Capital increases	298.3	238.0	2,441.0	83.2	692.3	1,230.6	434.7
Of which public offerings for subscription	229.4	173.0	1,654.0	0.0	405.5	869.6	379.1
Public offers to sell shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: BME and CNMV.

1 Transactions registered with the CNMV. Does not include data from MAB, ETFs or Latibex.

2 Trades linked to the exercise of greenshoe options are separately accounted for.

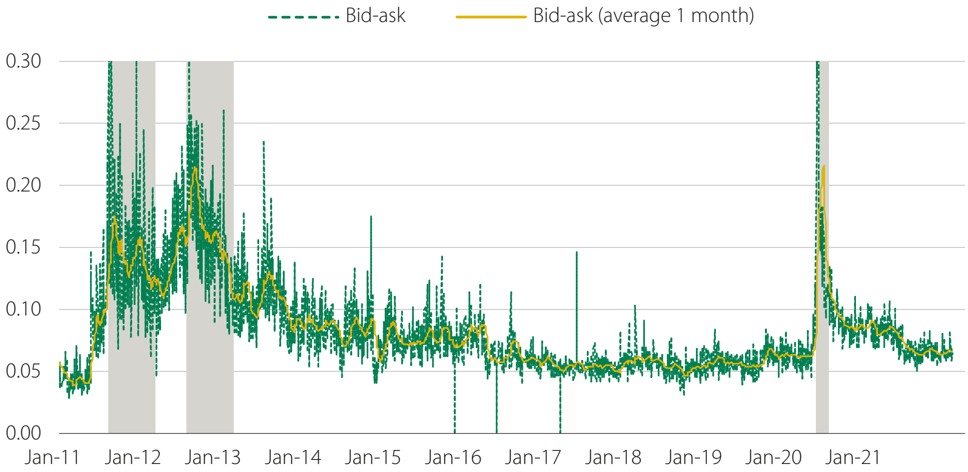
3 Capital increases for non-monetary consideration are stated at market value.

4 In scrip dividends, the issuer gives existing shareholders the option of receiving their dividend in cash or converting it into shares in a bonus issue.

5 Transactions not registered with the CNMV.

Liquidity conditions in the Ibex 35, measured by the bid-ask spread, remained stable, with small spreads, but tended to deteriorate slightly in the last quarter of the year, as they had in the previous quarter. Despite the increase in traded volumes, the spread experienced a very slight rise in the quarter, favoured by the increase in volatility, reaching an average of 0.068%, slightly above the average of the previous two quarters (0.065% in the second and 0.066% in the third), but below the average for the year (0.07%) and its historical average (0.09%). Likewise, its value fluctuated during the year between 0.107% at the end of January and 0.05% in June.

Liquidity indicator (bid-ask spread) of the Ibex 35 FIGURE 16



Source: Refinitiv Datastream and own calculations. Information is presented on the Ibex 35 bid-ask spread and the last month's average. The vertical lines of the graph refer to the introduction of the precautionary prohibition on short-selling dated 11 August 2011, its subsequent lifting on 16 February 2012, the new prohibition of 23 July 2012 and its lifting on 1 February 2013 and the most recent prohibition which extended from 16 March to 18 May 2020. The last two prohibitions affect all entities.

3.5 Results

The recovery of economic activity during the first half of 2021 gave rise to a strong increase in the results of non-financial listed Spanish companies in this period. In very general terms, both the amount of company profits and debt indicators returned to levels relatively similar to those existing just before the pandemic. Thus, as can be seen in Table 15, the aggregate profit of all non-financial listed companies between January and June 2021 exceeded the figure of €17.50 billion, which contrasts with the losses of close to €2 billion in the same period of the previous year, the worst moments of the COVID-19 crisis in economic terms. All sectors experienced improvements in the margins evaluated, although the strong recovery in the result of trading and services companies stood out for its intensity. Their profits for the first half of the year were €12.50 billion more than in the first half of 2020. In the rest of the sectors, the increase in profits ranged between €1.25 billion (construction and real estate) and €3.44 billion (energy).

An analysis of the results at the individual level within each sector shows some characteristic patterns. In a context of widespread recovery in entities' profit and loss accounts, we continued to see very high concentrations in certain sectors, with the results of a small number of companies determining those of the whole sector. This occurred, for example, in the energy sector with Repsol[29] and in the trade and

29 The increase in Repsol's net profit between H1 2020 and H1 2021 was €3.76 billion.

services sector with Telefónica.[30] It can also be seen that in all sectors, except energy,[31] close to 80% or more of the entities presented a better result than the previous year. That said, many of the entities that experienced an improvement, especially in the industrial sector and in the trade and services sector, continued to record losses or very slight increases in profits.

Trends in results by sector: non-financial listed companies TABLE 15

Millions of euros

	Operating profit/(loss)		Profit/(loss) before tax		(Consolidated) profit/(loss) for the year	
	H1 2020	H1 2021	H1 2020	H1 2021	H1 2020	H1 2021
Energy	4,702.5	8,271.5	3,090.4	7,686.9	1,810.4	5,249.9
Manufacturing	294.7	3,399.2	92.7	3,057.7	41.8	2,273.1
Trading and services	-2,201.5	10,833.5	-4,027.9	9,302.6	-4,126.8	8,430.9
Construction and real estate	1,431.1	2,314.5	265.7	1,387.5	296.4	1,552.0
Aggregate total	**4,226.8**	**24,818.7**	**-579.0**	**21,434.7**	**-1,978.2**	**17,505.8**

Source: CNMV.

The level of debt of non-financial listed companies showed an increase of 1.2% in the first half of the year, which it ended close to €259 billion. This level increased in trade and services companies (by 3.7%, to almost €100 billion) and, to a lesser extent, in industrial companies (by 1.6%, to €24.15 billion), but it fell in the construction and real estate sector (-1%) and in the energy sector (-0.6%). The aforementioned increase was compatible with a decrease in the leverage ratio, which went from 1.12 to 1.02, due to the more intense increase in companies' equity (see Table 16). These ratios ranged between 0.56 for companies in the industrial sector and 1.40 for those dedicated to trade and services. For its part, the debt coverage ratio, calculated as the ratio between debts and operating income, improved substantially in 2021 due to the strong increase in aggregate operating income, which increased practically sixfold between 2020 and 2021.

30 The increase in Telefónica's net income between H1 2020 and H1 2021 was €9.97 billion.

31 In this sector this percentage is 47%.

Trends in gross financial indebtedness by sector: non-financial listed companies

TABLE 16

Millions of euros

	Debt		Debt/equity		Debt/operating profit[1]	
	H1 2020	**H1 2021**	**H1 2020**	**H1 2021**	**H1 2020**	**H1 2021**
Energy	88,883.5	88,392.9	0.91	0.86	9.5	5.3
Manufacturing	23,761.2	24,151.5	0.55	0.56	40.3	3.6
Trading and services	96,379.8	99,899.4	1.89	1.40	–	4.6
Construction and real estate	46,828.8	46,380.0	1.29	1.24	16.4	10.0
Aggregate total	**255,853.3**	**258,823.8**	**1.12**	**1.02**	**30.3**	**5.2**

Source: CNMV.

1 Ratio calculated with annualised operating profit.

II Reports and analysis

Analysis of the behaviour of retail investors in the financial markets during the COVID-19 crisis

Guillermo Cambronero Pérez (*)
Gloria Ruiz Suárez (*)

(*) Guillermo Cambronero Pérez and Gloria Ruiz Suárez belong to the Department of Studies and Statistics of the CNMV.

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Summary

This article describes how retail investors' trading in the equity market evolved in 2019 and 2020 and seeks to identify changes it may have undergone as a result of the uncertainty associated with the COVID-19 crisis. For this, a sufficiently representative sample of retail investors' trading in Ibex 35 shares during the two years was taken.

The main results of the study show a strong increase in trading in Ibex 35 shares by retail investors from the onset of the crisis, at first with more intensity on the buy side (the volume of purchases quadrupled in March 2020) and later on the sell side. The increase in trading was due to the substantial increase in the number of transactions carried out by these investors, which intensified as a result of the mass advent of new investors to the market at times of greatest turbulence. Since then, retail investors' participation has gradually diminished, but has not returned to pre-crisis levels.

The increase in retail trading during the crisis is a trend also identified in other European countries such as France and Belgium. In Spain, the increase in trading of Ibex 35 shares by retail investors stood out above all in March, June and November 2020. In March 2020, coinciding with a monthly fall in the Ibex 35 of 22.2%, the highest monthly purchase volume for the period was reached – approximately €4 billion (around €1 billion per month in 2019). The highest monthly volume of sales was recorded in November (€2.83 billion, compared with a maximum of €1.6 billion in 2019), at which time the index rebounded by 25.2% compared with the previous month.

In the same way, the number of transactions carried out in the first weeks of the crisis saw a very sharp increase: in March 2020, the number of purchase transactions executed increased by more than fourfold and the number of sales transactions more than doubled compared with the same month of 2019. This development led to a strong rebound in total trading volume by retail investors as the median value per trade fell during the COVID-19 crisis. After the first few months of the health crisis, the boom in stock market transactions softened, and there was a gradual return towards initial trading values, which had not however been reached at the end of 2020.

The predominant sectors in which retail investors traded changed slightly as the crisis progressed: most of the trading continued to take place in the sectors that were already most significant before the crisis, although some of them, such as the financial and communications sectors, lost ground relatively in favour of other sectors such as industrials and health care.

Retail investors' share of total trading increased during the first wave of the virus, although subsequently returned towards initial values, without reaching them at the end of 2020. Remarkably, the greatest increases in retail investors' involvement was in the sectors most affected by the crisis, such as tourism, communications and finance. However, share ownership data by type of investor for 2020 do not reveal significant changes in the percentages attributed to households, the position of retail investors being similar to that of previous years (17.1% in 2020, 1 percentage point above the figure for 2019, although far from those of previous years).

In general, a majority proportion of the volume traded in Ibex 35 shares between 2019 and 2020 was carried out by men (around 80%), with this proportion increasing slightly in the first months of the crisis. The median age of retail investors as a whole reflects the fact that the women trading these stocks are older than the men. Although the average ages of both men and women who traded decreased at the beginning of the pandemic, they later increased again, despite which they ended 2020 at lower levels than the initial ones.

Another aspect to highlight in the early part of the crisis is the mass influx of retail investors into the market, especially on the days when the Ibex 35 posted its sharpest falls. The demographic characteristics of these new investors differ slightly from those of the overall pool of investors. In particular, their average age is lower in the initial stage of the crisis, as is the proportion of men operating in the market (although it continues to be the majority).

In conclusion, this work describes how individuals' investment behaviour evolved in the situation of uncertainty and volatility experienced in the stock markets in 2020. There was a significant increase in stock market activity, especially in the initial stage of the crisis, due to the substantial increase in the number of market transactions (smaller on average) and to an extraordinary influx of investors, all in an environment in which new technologies substantially facilitate access to markets. In the initial stage, the increase in trading was above all on the buy side, while at the end of the year, when prices recovered, there was a greater increase in activity on the sell side. These results seem to show that at least some retail investors identified attractive opportunities to invest in shares at times of greatest price declines, expecting a recovery in prices in the future, and to disinvest at the end of the year, when the recovery of these prices made it possible to obtain a return.

The results presented in this article, which is an abridged version of a forthcoming larger working paper, are accompanied by the publication of an interactive dashboard accessible online for all users from any electronic device.[1] Through this dashboard, users can access the main dynamic figures appearing in this article, which can easily be modified by users, who can then observe the results themselves by selecting a specific period, type of market, sector, age group, gender and type of investor.

1 https://app.powerbi.com/view?r=eyJrIjoiZmNmNmVkNzktYTlmNC00YWNkLWE5N2EtY2E1ZDZiNmQ4ODgzIiwidCI6IjRiZDE1NWQzLWNiYjUtNGFjMC04MzZlLWJkMmFhMjljZDk2OSIsImMiOjl9

1 Introduction and motivation of the analysis

The crisis unleashed by the spread of COVID-19 in the first quarter of 2020 led to abrupt declines in prices on national and international equity markets, as well as spikes in volatility indicators that, in some cases, peaked at levels higher than those recorded in the financial crisis of 2008. The turbulence caused in the stock market and the lockdown[2] gave rise to an increase in activity on the Spanish stock market in March 2020, with notable increases in trading volumes being observed, in line with the trend in other European markets.

Between 2019 and 2020, only 5.5% of the trading volume for purchase and sale operations executed on Ibex 35 shares on the Spanish stock exchanges was carried out by retail investors. Although this proportion is not very high, a specific analysis of these investors' transactions is of interest for several reasons. In the first place, households' investment in listed shares represents a significant part of the total portfolio of their financial assets, even above the average for the euro area.[3] Secondly, pursuit of the CNMV's objective of protecting retail investors can benefit from better information on the investment pattern of this group, extending the analysis to times of turbulence or exogenous shocks such as that of the COVID-19 crisis.

This work analyses the behaviour of retail investors in the equity market in 2019 and 2020, establishing four sub-periods that make it possible to identify any significant changes in the investment patterns of this group as a result of the pandemic. In this way it aligns with other similar works carried out by the securities authorities of France and Belgium. In particular, the work pursues several objectives: i) to show the evolution of the number and amount of purchases and sales of listed shares by retail investors during 2019 and 2020, ii) to relate these data to certain demographic characteristics of individuals and iii) to identify whether the COVID-19 crisis brought about a structural change in the behaviour of retail investors.

2 Description of the data sample

This work seeks to assess the behaviour of retail investors in the financial markets. For analytical purposes, retail investor is considered to mean any natural person regardless of investment experience.[4] The bulk of this analysis is carried out based on the information collected through the communication of transactions and order

2 The lockdown in a context of falling prices led to an increase in investor interest in carrying out stock transactions. In fact, according to the Google Trends database, in Spain, from mid-February to the second week of March, searches relating to investment in the stock market increased by more than 220%, and those relating to the Ibex 35 and the stock market increased by more than 160%.

3 In 2019, the investment of Spanish households in listed shares represented just over 5% of their total portfolio (around 4% in the euro area as a whole). This percentage fell during 2020 (4.1% in March), although at the end of the year it returned to figures close to those existing before the crisis (4.9%)

4 This criterion is not entirely equivalent to that established by the regulations, which classify the clients of investment firms as eligible counterparties, professional clients and retail clients (Article 203 of the recast text of the Securities Market Act [Royal Legislative Decree 4/ 2015]).

records of investment firms,[5] the financial instruments reference database system (FORDS), the statistical database of the ECB and the Statistics of the Continuous Population Register of the National Institute of Statistics.[6]

The analysis carried out is based on the trading data of retail investors in Ibex 35 securities on regulated markets and the main multilateral trading facilities (MTFs) and systematic internalisers (SIs) between 2019 and 2020, since in this way account is taken of the most liquid listed shares traded in Spain.[7] In addition, we have divided these two years into four sub-periods based on the events and progress of the health crisis, to facilitate the analysis of its impact on retail investors' behaviour.

The first of them, prior to the outbreak of the COVID-19 crisis, goes from 1 January 2019 to 15 February 2020 and shows the stock market operations of retail investors in normal times (or in the absence of turbulence). The following sub-period corresponds to the first wave of the virus, from 16 February to 30 April 2020, which stands out for the imposition of restrictive measures on the population such as lockdown. It is followed by the de-escalation sub-period, which begins on 1 May and ends on 30 September 2020, in which some of the measures that limited the movement of people, among others, are gradually withdrawn; and the last sub-period corresponds to the second wave of the virus, which runs from 1 October to the end of 2020.

The study sample is made up of a total of 18,425,772 transactions by retail investors trading in Ibex 35 shares. Approximately 34.5% of these were carried out in 2019, while almost 66% were carried out in 2020, thus coinciding with the outbreak of the COVID-19 crisis (see Table 1).

In relation to the type of operations that were carried out in these periods, it is worth noting that, starting from a very similar proportion of purchases and sales in the pre-crisis period, in the first wave of the virus purchases skyrocketed, although later the proportion between purchases and sales returned to their initial values. This increase in purchases was probably caused by the large falls in share prices, which led to a 28.9% loss in the value of the Ibex 35 in the first quarter of the year.[8]

Regarding the main demographic variables,[9] in view of the data in Table 1, it is confirmed that there is a greater presence of men than women who invest in listed shares, with this difference increasing in the first wave of the virus (from 79.3% to 84.3%). The age of the investors also provides relevant information on possible changes in the behaviour of retail investors, the increase in trading by younger

5 Article 26 of the MiFIR (Markets in Financial Instruments Regulation, Regulation (EU) No. 600/2014) establishes that investment firms that execute transactions in financial instruments must report these transactions to the competent authority.

6 These data have successfully passed all the controls provided for in the applicable regulations for their incorporation into the corresponding databases and, in addition, a series of additional and predefined quality controls have been developed that allow the automated and standardised obtainment of a reliable and consistent set of data on which to conduct the study.

7 93% of the volume traded on the continuous market corresponds to Ibex 35 shares.

8 The Ibex 35 registered the largest daily loss in the history of the index on 12 March 2020, with 14.1%.

9 In this regard, only individual transactions are taken into consideration, excluding those of accounts with shared ownership.

investors since the outbreak of the crisis being particularly notable. However, these aspects will be discussed in greater depth in the section on the characteristics of retail investors in financial markets.

Descriptive statistics of the data sample TABLE 1

	Sub-period 1 1 Jan. 2019-15 Feb. 2020	Sub-period 2 16 Feb. 2020-30 Apr. 2020	Sub-period 3 1 May 2020-30 Sept. 2020	Sub-period 4 1 Oct. 2020-15 Feb. 2020	
	Pre-crisis	**First wave**	**De-escalation**	**Second wave**	**Total**
Transactions					
% of transactions	39.3	19.0	26.0	15.7	–
% of purchases	48.7	64.5	56.5	48.5	**53.7**
% of sales	51.3	35.5	43.5	51.5	**46.3**
Markets					
% on regulated markets	96.9	96.8	97.2	95.7	**96.8**
% on MTFs	1.9	2.2	2.0	3.4	**2.2**
% on SIs	1.2	1.0	0.8	1.0	**1.0**
Gender[1]					
% men	79.3	84.3	84.2	82.0	**82.0**
% women	20.7	15.7	15.8	18.0	**18.0**
Age[1]					
% 18-34	5.2	9.5	8.2	7.0	**7.1**
% 35-49	27.6	36.8	37.7	35.2	**33.3**
% 50-64	35.6	33.0	33.5	34.7	**34.4**
% 65-99	31.6	20.7	20.5	23.1	**25.2**

Source: CNMV.

1 Prepared from data of the individual transactions carried out with Ibex 35 securities, excluding those of accounts with shared ownership.

3 Retail investor trading during the COVID-19 crisis

The COVID-19 crisis led to a notable increase in stock trading by retail investors. This section provides evidence of this based on an analysis of the transactions carried out by these investors in individual accounts with Ibex 35 shares between 2019 and 2020.[10, 11]

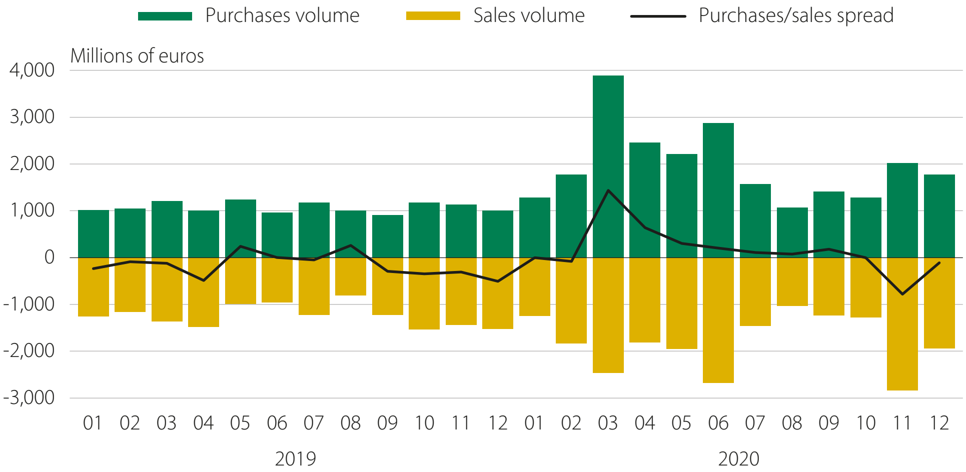
Figure 1 shows the monthly buying and selling volume of retail investors from January 2019 to December 2020. A higher volume of purchases and sales can be

10 During these two years, four companies were added to the index: in June 2019, MásMóvil replaced Técnicas Reunidas; in June 2020, Almirall replaced Mediaset; in September 2020 MásMóvil was excluded from the index and Pharma Mar replaced Ence, and, finally, in October 2020 Solaria was added. Analysis of the data shows that retail investors carried out transactions on all the stocks listed in the Ibex 35 during 2019 and 2020, with the exception of Técnicas Reunidas.

11 In this analysis, only individual transactions are taken into consideration, excluding those of accounts with shared ownership.

observed during 2020 and, in particular, the months of March, June and November stand out. During the pre-crisis stage, monthly purchases were around €1 billion, and sales, which fluctuated a little more, never exceeded €1.6 billion per month.

Evolution of the trading volume of monthly purchases and sales FIGURE 1



Source: Transaction reporting. CNMV.

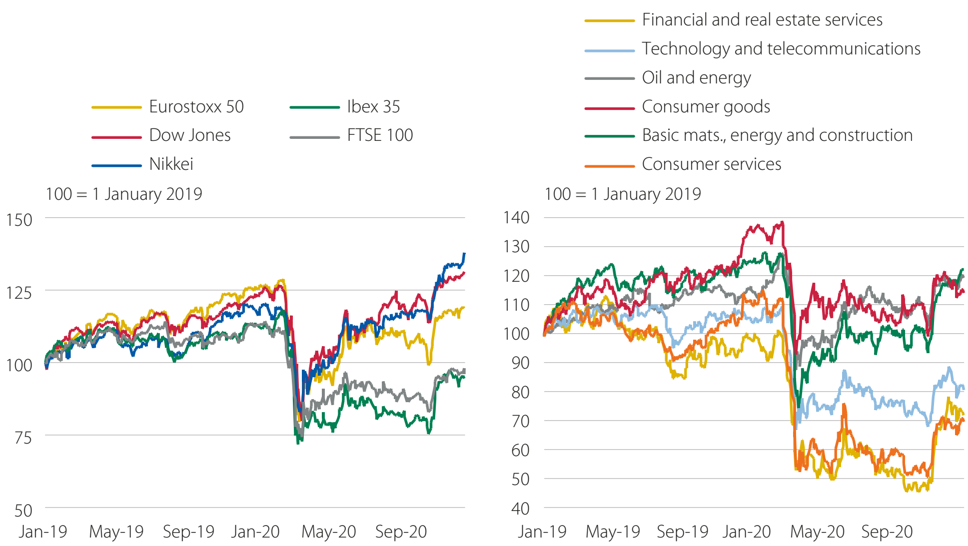
In general, in the pre-crisis period, the volume of sales was greater than that of purchases. However, in March 2020, during the first wave, the volume of purchases was significantly higher than that of sales, a trend that was also observed in other countries such as Belgium and France. Thus, the volume of purchases grew rapidly and intensely, reaching nearly €4 billion in the month, in excess of sales, which also increased, but only to €2.5 billion. At the same time, prices of Ibex 35 stocks had collapsed, the index posting the biggest daily fall in its history (14.1%)[12] and closing the month with losses of 22.2% compared to February and 28.9% in the first quarter of the year (see Figure 2).

The data published by other national authorities such as those of Belgium and France after the COVID-19 crisis show very similar trends in trading volume of purchases and sales to those seen in Spain. In France, the number of purchase transactions quadrupled in March 2020 compared with the monthly average for 2019 and their amount tripled. In Spain, the number of purchase transactions carried out in March 2020 also increased by more than fourfold compared with the monthly average for 2019, while sales more than doubled, and the volume of purchases in March 2020 was three times higher than the average monthly values of 2019.

It is worth highlighting the trend in purchases and sales in Spain in the three subperiods that have been identified since the start of the crisis and relating these data to the figures from the pre-crisis stage of 2019.

12 On 12 March 2020.

Evolution of the returns of the international indices and of the sectors of the IGBM (Madrid Stock Exchange General Index) FIGURE 2



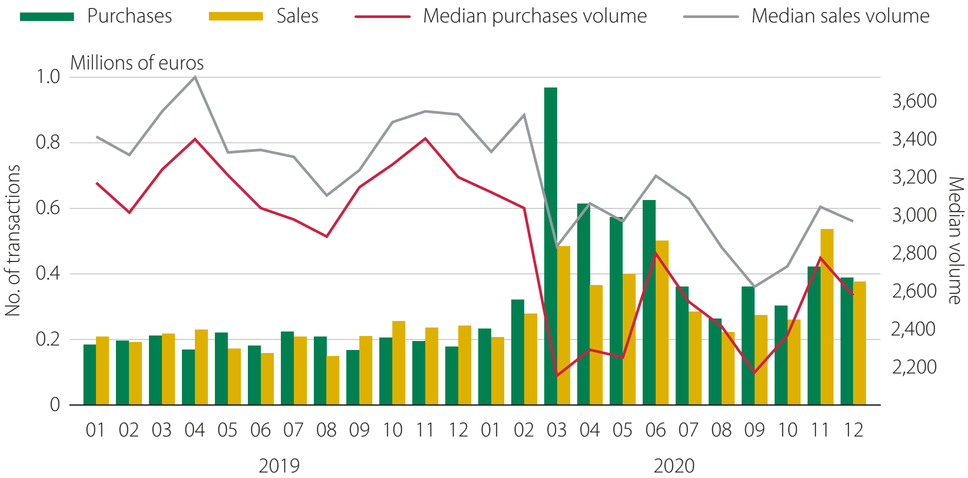
Source: Refinitiv Datastream.

In the first of these sub-periods, which coincides with the first wave (weeks 8 to 18 of 2020), the high volumes of purchases and sales stand out compared with the pre-crisis period: on average, 180% higher than the average weekly purchases of the pre-crisis period and 67% higher than sales. During the de-escalation period, with the price of the Ibex 35 rising, a first new sales record was registered (€1 billion in week 23, in June 2020). Finally, in the second wave, the record for weekly sales was again broken (€1.19 billion in week 46, the second week of November). At the end of November the Ibex 35 reached 8,000 points, a price not seen since March.

It is interesting to observe the monthly median size of transactions carried out by retail investors in the period analysed (see Figure 3). In the pre-crisis stage, this ranged between approximately €2,900 and €3,400 for purchase transactions and between €3,100 and €3,700 for sale transactions. In the first months of the pandemic, a significant decrease in these amounts was observed: that of purchase transactions fell from €3,110 at the beginning of the year to €2,170 in March, and the median monthly amount of sales fell from €3,320 in January 2020 to €2,845 in March. In France, in contrast, this downward trend in the median value per transaction was not observed. French purchase volumes remained relatively stable during the first wave of the virus and sales volumes increased. We commented earlier on the notable increase in trading volumes, while at the same time there were these decreases in the median value of transactions. This is explained by the substantial increase in the number of transactions: in March 2019, retail investors carried out 212,306 purchase transactions and 217,812 sale transactions, while in the same month of 2020 purchases were more than four times higher (969,998 transactions) and sales more than doubled (487,400 transactions).

Throughout the remaining sub-periods of the crisis, both average volumes followed a similar trend, albeit with different degrees of intensity. They increased in the first month of de-escalation and decreased between June and September. In the final part of the year, new increases in the median volume per transaction were observed (except in December), but pre-crisis levels were not reached.

Number of monthly purchase and sale transactions and average volume per transaction FIGURE 3



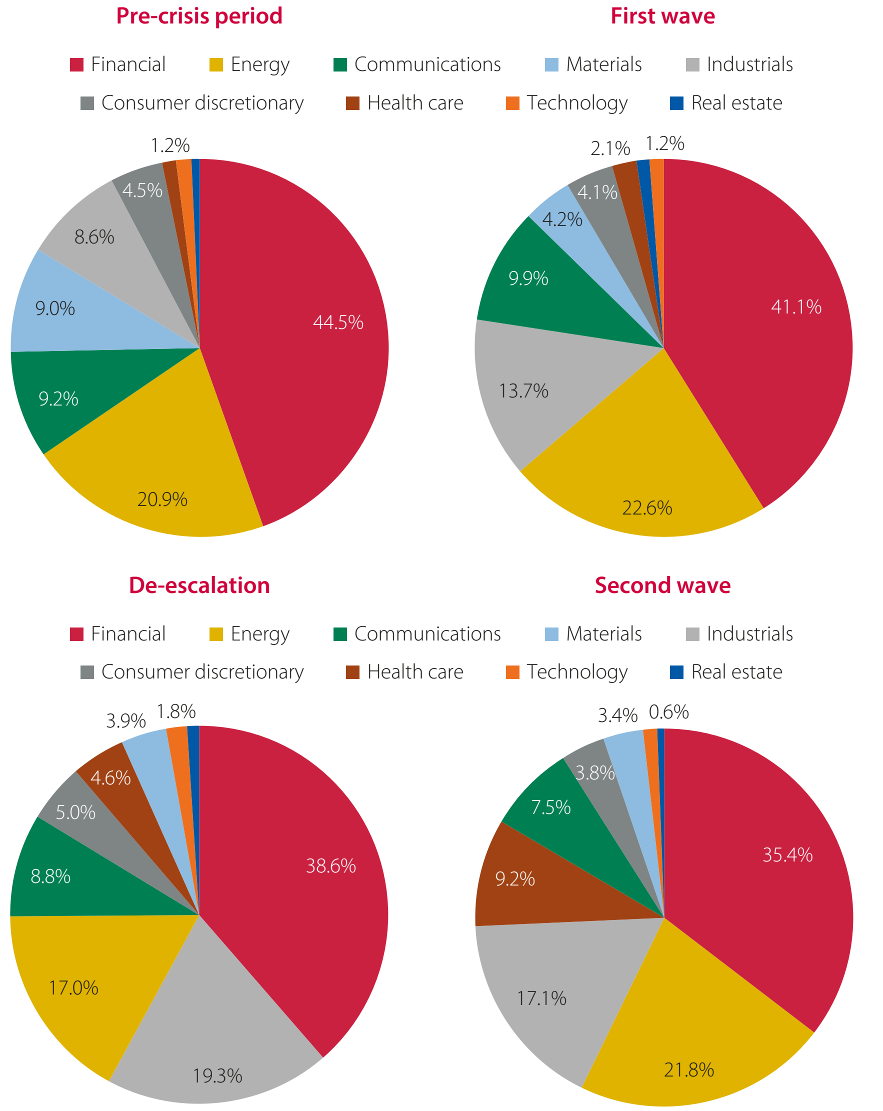
Source: Transaction reporting. CNMV.

The analysis by sector (see Figure 4) reveals that most of the trading by retail investors was in securities of financial institutions, although this proportion gradually decreased in each of the sub-periods of the study, going from 44.5% of the total volume of retail trading in the pre-crisis stage to 35.4% in the second wave. Similarly, retail investors also reduced the proportion of their trading in stocks of companies specialising in materials (they traded 9% in the pre-crisis stage, 4.2% in the first wave and 3.4% in the second). In sectors such as energy, trading remained relatively stable (on average around 21% of the total), while others such as health care[13] and industrials saw trading increase (from 4.6% and 8.6% respectively in the pre-crisis stage to 9.2% and 17.1% in the second wave).

13 This increase was also partly due to the inclusion in the index of the pharmaceutical company Pharma Mar.

Trading by sectors and periods

FIGURE 4



Source: Transaction reporting. CNMV.

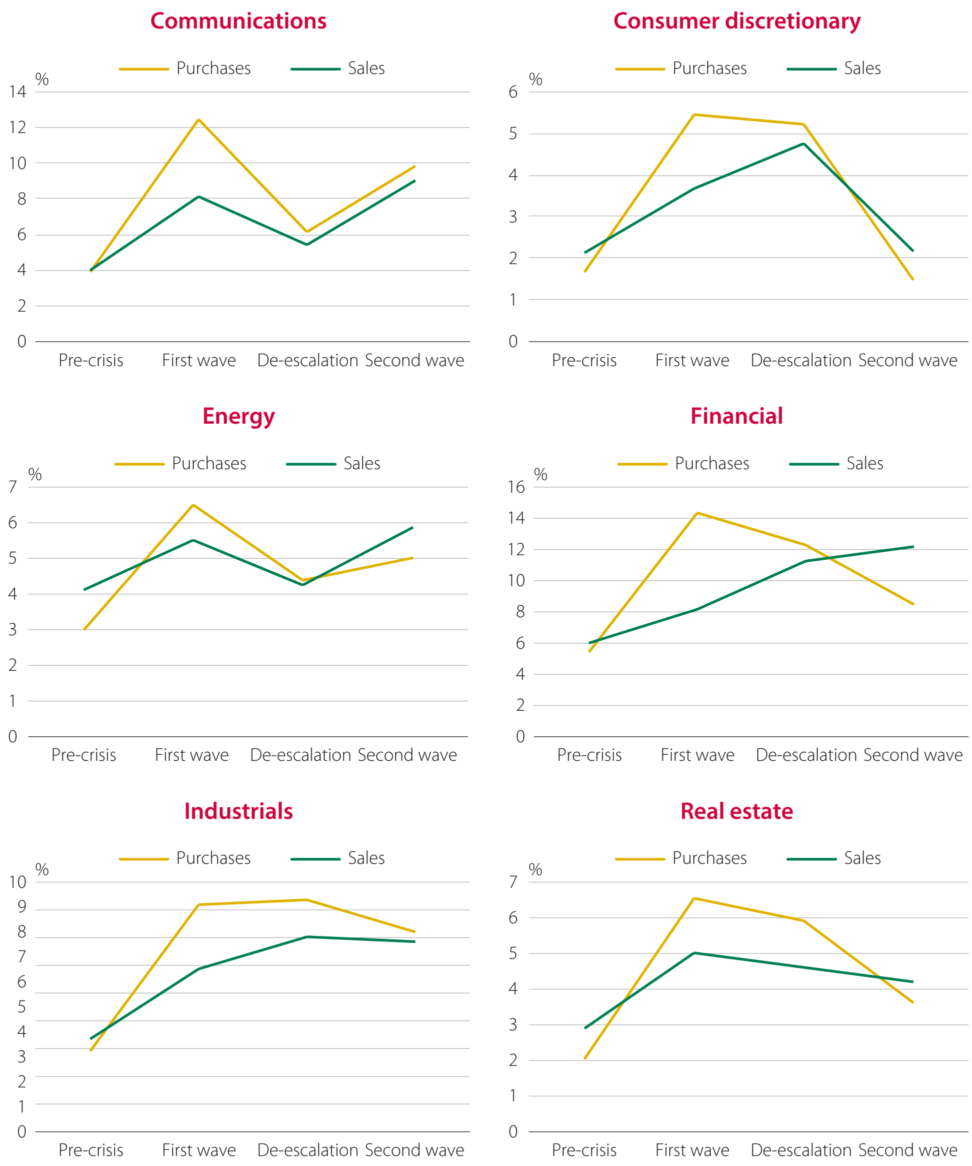
To complement the analysis, note should be taken of the panels in Figure 5 showing the proportion of total trading carried out by retail investors and distinguishing the four sub-periods, the various sectors and purchase and sale transactions. We mentioned earlier that retail investor's participation was relatively small, representing around 5.5% of total transactions between 2019 and 2020.[14] However, there are some interesting patterns over time and across sectors related to the crisis.

In the first wave of the virus, there were increases in the presence of retail investors in most sectors due to the notable increase in their transactions. Thus their trades increased threefold or more as a proportion of total trades in some sectors such as communications, consumption and real estate. One thing that stands out is that retail investors significantly strengthened their presence in companies and sectors

14 Considering Ibex 35 shares traded on the regulated market.

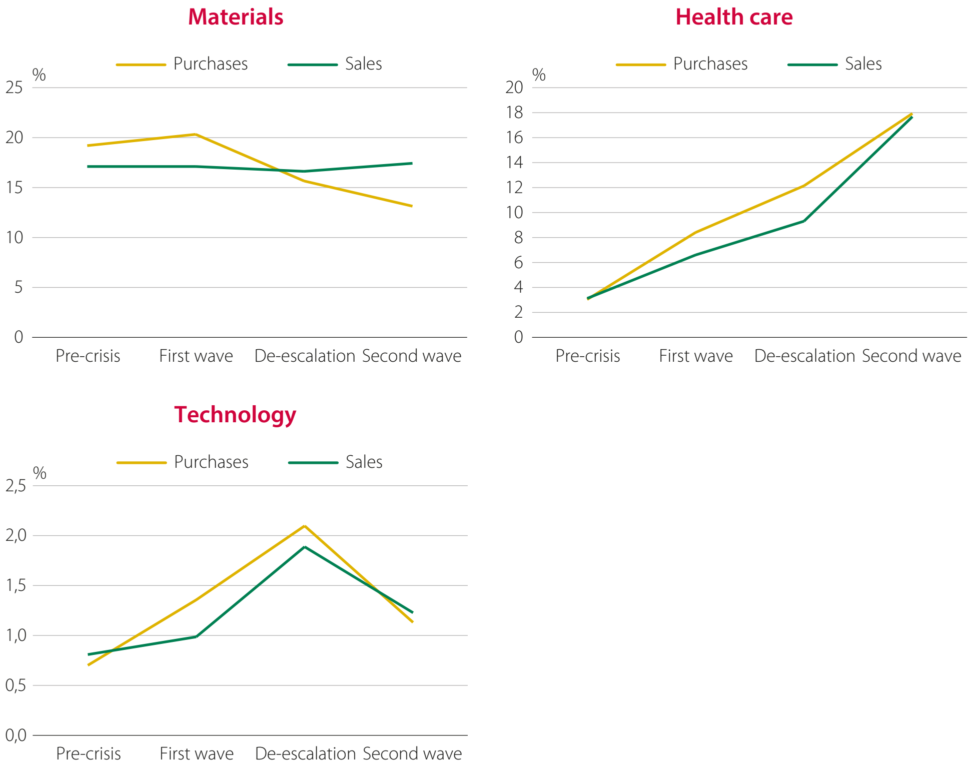
that are more volatile or affected by the pandemic (for example, companies dependent on tourism[15] or the financial sector), probably with the expectation of obtaining a future return in a recovery context. We infer from these data that retail investors were more inclined to enter the market in this period of uncertainty than were institutional investors. After the increase registered in the first wave, a decrease in the proportional presence of retail investors in total trading was observed during the rest of the year, but it remained higher than that observed before the pandemic. In aggregate terms, retail purchase transactions increased from 4% of the total before the crisis to a peak of 9.4% in the first wave and ended 2020 at 6.4%.

Presence of retail investors by sector with respect to total trading FIGURE 5



15 These companies are classified in the consumer discretionary and industrial sectors.

Presence of retail investors by sector with respect to total trading *(continuation)* FIGURE 5



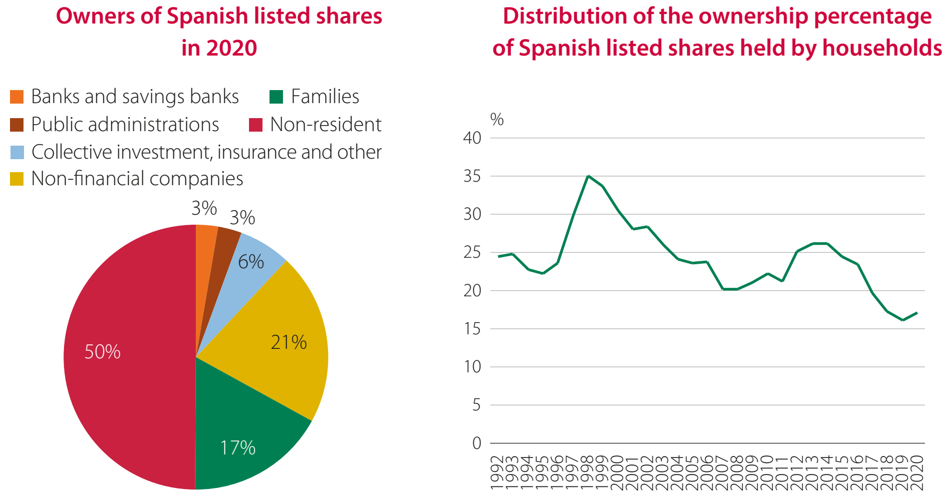
Source: Transaction reporting. CNMV.

An increase was also observed in the presence of retail investors in sales transactions as a percentage of total trading during the first wave, although it was comparatively lower than for purchases. The sectors with the greatest increases in the presence of retail investors in sales transactions were communications and health care. In both cases, the presence of retail investors doubled, going from 4.0% in the communications sector and 3.1% in the health sector in the pre-crisis stage to 8.1% and 6.6% in the first wave, respectively. After the first wave there was no uniform trend across sectors, although in aggregate the proportion of total sales transactions carried out by retail investors continued to increase, going from 4.5% in the pre-crisis phase to 6.4% in the first wave and 7.6% at the end of the year.

Despite the increase in trading by retail investors during the COVID-19 crisis, their relative importance in terms of the distribution of ownership of the shares of Spanish listed companies increased only slightly in 2020, remaining at historically low proportions. In its *Annual report* on ownership of listed shares,[16] BME stated that the participation of households in the ownership of these shares stood at 17.1% in 2020, one percentage point above the figure for 2019. Despite this slight increase, the first since 2014, this proportion is far from the data from previous years, which were almost always above 20% and with maximums close to 35% (see right-hand panel of Figure 6).

16 These data are not fully comparable with those of this study, among other reasons because they refer to all listed shares and not just those of the Ibex 35.

Ownership of Spanish listed shares FIGURE 6



Source: BME.

4 Characteristics of retail investors during the COVID-19 crisis

This section presents a description of the main characteristics of retail investors, with information on their age and gender, and investment indicators by age group.[17]

An analysis of investors' gender reveals that most of the volume traded in Ibex 35 shares between 2019 and 2020 was carried out by men (around 80%), and that this proportion increased slightly in the first months of the crisis. In January 2020, the proportion of traded volume executed by men was 79%. This percentage increased in the months forming the first wave and part of the de-escalation (between March and July) to almost 85%. In the second wave, it fell slightly, to 82%, a figure more similar to those of the pre-crisis stage.

With regard to the average age of investors for each gender, two fundamental aspects must be highlighted: firstly, the average age of women who trade Ibex 35 shares is greater than that of men (by around three years, throughout the period); and secondly, the average age of both genders decreased significantly during the first wave, reaching minimum values in April.

Specifically, in the pre-crisis stage, the average age of women fluctuated between 58 and 60 years, while in April, during the first wave, it decreased to 53 years. During the de-escalation, slight increases were observed, to an average of 57 years in July and 56 years until the end of 2020. For its part, the average age of men in the pre-crisis stage was 56 years. In the first wave, a minimum was observed in the average age of men (around 50 years), with a subsequent increase, to 53 years at the end of

17 In this analysis, only individual transactions are taken into consideration, excluding those of accounts with shared ownership.

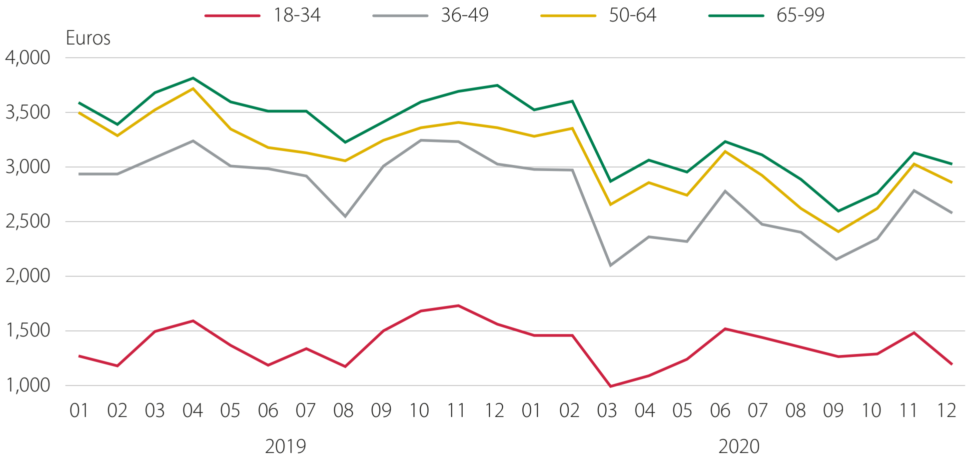
the year. Therefore, a similar trend is identified in the average age of both sexes, which decreased by approximately three years in the first wave before rising again, but without returning to pre-pandemic levels by year-end.

It is interesting to note below the distribution of buying and selling trading volume based on the age of retail investors. In 2019, the age group with the highest volume of purchases was 50 to 64, followed by the over 65s, the 36 to 49 group and, finally, the youngest, from 18 to 34. In 2020, the order according to the volume of investment of the age groups was different: although the first (50 to 64) and the last (the youngest) maintained the same positions, a change was observed in the intermediate groups, since those between 36 and 49 years old bought a greater volume of shares than those over 65.

The youngest investors were those who made the lowest volume of purchases. However, it was also them the ones that increased their purchases most, threefold in 2020 compared with 2019, while the other age groups increased to a lesser extent (for example, those between 36 and 49, by 132% compared with 2019). As in Spain, in Belgium the youngest investors also increased their investments by more than the other age groups, although those with the most investment activity remained the same. Regarding the volume of sales, a very similar trend is observed, although with less sharp increases in all age groups. Again, the group that recorded the most significant increases in sales volume was the youngest, 128% more in 2020 compared to 2019.

An analysis of trading volumes per trade (median) reveals the following patterns. As seen in Figure 7, the largest volumes occur among older investors. In general terms, this result could be attributed to the fact that older groups tend to have a higher level of income and wealth, as well as more experience in making investment decisions.

Median trading volume of retail investors by age group FIGURE 7

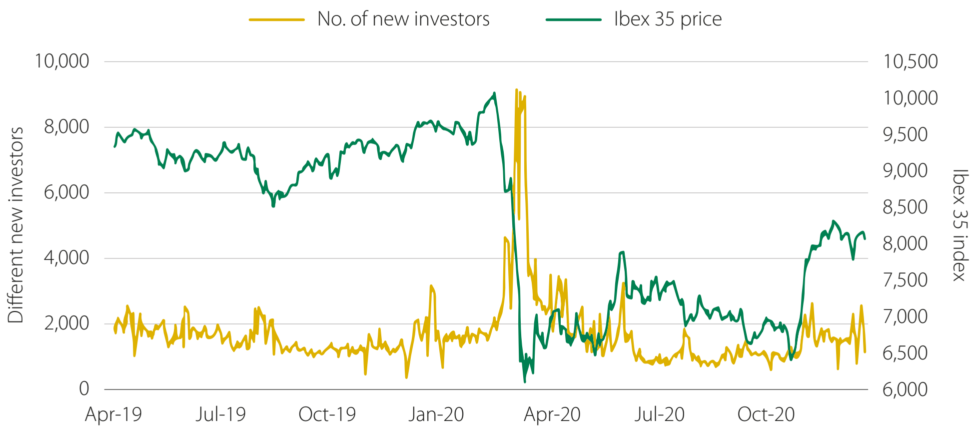


Source: Transaction reporting. CNMV.

Finally, the massive influx of new investors as a result of the pandemic should be highlighted. In this respect, a transaction will be deemed to be carried out by a "new investor" if it is the first transaction that the individual carries out in the 2019-2020 period. After that first transaction, that particular investor will be classified as an "existing investor".

In the pre-crisis stage, the daily number of new investors stood at an average of 1,630 individuals and, as can be seen in Figure 8, at the end of February 2020, in the first wave of the virus, strong daily increases were recorded in the number of new investors, coinciding with the beginning of the decline in stock prices. In fact, the days of the greatest daily falls in the Ibex 35 saw the greatest increases in the number of new investors, with figures close to 9,000 individuals per day.

Number of new investors in relation to the Ibex 35 FIGURE 8



Source: Transaction reporting. CNMV.

The demographic characteristics of the new investors also present slight variations with respect to those observed in the complete sample. Specifically, their average age is lower than that of all retail investors at the beginning of the crisis, although the average age of women is still higher than that of men (by five years on average). The proportion of men who invest in Ibex 35 shares continues to predominate (67% on average in 2020), although it is lower than that of the total sample of investors.

5 Conclusions

This work exposes the evolution of the transactions of retail investors in the equity markets during 2019 and 2020, in order to identify the characteristics and differences arising as a result of the COVID-19 crisis.

In a context of global uncertainty, characterised by sharp falls in prices and high volatility, the trading volumes of private individuals in Spain increased significantly, as happened in other countries such as France and Belgium. In particular, during the first wave of the virus, in March 2020, coinciding with the biggest falls in the history of the Ibex 35 (22.2% compared to February), the maximum volume of purchases by these investors occurred (almost €4 billion in the month, four times the monthly average for 2019). On the other hand, the maximum volume of monthly sales was seen in November (€2.83 billion, compared with the monthly maximum reached in 2019 of €1.6 billion), coinciding with the largest monthly rise of the Ibex 35 in 2020 (25.2%). A decrease in the median value of transactions was also observed, which indicates that the increase in the amount of trading was the result of a notable increase in the number of trades.

This study has also revealed certain interesting demographic characteristics of retail investors: around 80% of the volume traded in Ibex 35 shares was carried out by men, a proportion that increased slightly in the first months of the crisis. Regarding the average age of investors, it is worth highlighting the fact that that of men is less than that of women (by around three years throughout the period) and that for both groups it decreased significantly between February and April 2020. In addition, a massive influx of new retail investors was observed in the initial stage of the crisis, especially on the days when the Ibex 35 recorded its sharpest falls. The demographic characteristics of these new investors differ somewhat from those of investors as a whole, since they are younger and mostly men, but they do not differ so much from those of the total sample.

The strong initial increases in trading volumes and number of trades can be explained by different reasons. In the first place, the large falls in prices observed in March may have led to a mass buying mentality on the part of investors, who had an expectation of yield in a given period of time. In addition, the lockdown had the effect of increasing both the time available to operate in the stock market in a relatively informed manner and the resources available to invest, at least for some retail investors. The increase in resources was due to the savings recorded due to the impossibility of spending on activities that were restricted. Another fundamental aspect was the use of new technologies applied to finance, which avoids the need to physically go to any financial service provider to trade on the stock market.

In this way, significant variations were observed in the presence of retail investors as a proportion of total trading, which increased in both purchase and sale transactions with respect to the data prior to the crisis. This presence, which was 4% in buy transactions and 4.5% in sales in the pre-crisis sub-period, increased to 9.4% and 6.4% during the first wave and was 6.4% and 7.6%, respectively, in the second wave. However, share ownership data by type of investor for 2020 do not reveal significant changes in the percentages attributed to households, which stands at 17.1%, (1 percentage point above the figure for 2019, although far from the 23% average between 2010 and 2018).

This work allows to conclude that retail investors significantly increased their trading in the equity markets at times of greatest turbulence of the COVID-19 crisis, and that afterwards there was subsequently a partial normalisation of this trend towards the values observed before the crisis. Determining whether this normalisation is going to be completed or whether, on the contrary, the participation of retail investors will remain structurally higher requires having a longer time period. For this reason, the simultaneous publication on the CNMV website – together with this study – of a dashboard, with the main results of this work, which will be updated periodically, should prove particularly useful.

In addition to the time limitation of this work, there are other limitations related to the type of asset under study. This work is limited to the analysis of the trading of retail investors in Spanish listed shares and does not consider other assets such as foreign shares, investment funds, debt or even crypto assets, which are outside its scope of study. The inclusion of these assets, which is not possible in some cases due to lack of information, would allow a more complete view of the investment behaviour of retail investors in the financial markets during the COVID-19 crisis.

References

FSMA (2020). *The purchase and sale of BEL20 shares by individual investors during the coronavirus crisis.*

AMF, Markets Directorate (2020). *Retail investor behaviour during the COVID-19 crisis.*

BME, Research & Analysis (2021). *Annual Report on ownership of listed shares.*

Bank of Spain. Financial accounts of the Spanish economy.

European Central Bank Statistical Data Warehouse. Financial accounts of the euro area.

How securitisation has evolved since the financial crisis

Jesús González Redondo (*)

(*) Jesús González Redondo belongs to the CNMV's Department of Research and Statistics.

Table of contents

1 Introduction to securitisation

The financial crisis of 2007 laid bare the significant deficiencies of securitisation and the excesses and errors committed in securitisation internationally, forcing supervisory and regulatory bodies and the financial sector itself to develop a set of initiatives and reforms in this regard. The most important were aimed at correcting the asymmetry of information about the securitisations themselves between issuers and investors and the introduction of greater transparency about the assets forming part of them. The result was the establishment of a stricter legal framework for securitisation, with both market participants and regulators stressing the need to re-establish securitisation as a financing and risk transfer mechanism. The reforms seem to have had a significant impact on the various aspects of securitisation and on how it has developed in the market in the past few years.

Although both the industry and the regulators have traditionally seen securitisation as beneficial due to its ability to act as a mechanism for expanding credit activity and therefore economic activity, as well as being an important means of spreading risk among a large number of agents, the appearance of the global financial crisis revealed the weaknesses of this instrument and the bad practices in relation to its use by a large group of agents.

In Spain, significant differences were observed relative to other international jurisdictions as regards the origin of the securitisation problems and the decrease in its investor base; in Spain, these problems were attributable not to the behaviour or structure of securitisation itself, as was the case internationally, but rather to the markets' doubts about the solvency of the Spanish financial system and the direction of real estate prices. Spanish issuers of securitisations were also linked to their own issues, since they nearly all kept all the tranches of the securitisations on their balance sheets, which was not the case on the US or other EU markets.

In the years following the global financial crisis, both the regulators and the industry itself carried out a series of reforms and changes aimed at avoiding any recurrence of the problems and excesses seen during the crisis with securitisations and at restoring investor confidence in these products and removing the stigma attached to them. Ten years on, it can be affirmed that securitisations have undergone significant regulatory changes, but market activity is still far below the levels seen in the ten years leading up to the crisis, and doubts remain in some agents' minds as to the practices surrounding them. In fact, in most EU countries, including Spain, issues have been and still are largely for use as collateral in financing operations with the European Central Bank (ECB). The ECB's accommodative monetary policy of the last decade, characterised by abundant injections of liquidity to banks and the market, has to some extent obscured the markets' lingering misgivings[1] about this activity as reflected in the disappearance of a significant part of its investor base.

Sections 2, 3 and 4 of this work offer a summary of events in the securitisation market during the global financial crisis, the results of the most relevant academic literature on the problems of securitisation and the main regulatory changes adopted with a view to correcting the vulnerabilities identified. These sections assess securitisations and their vulnerabilities from an international point of view, since, as already mentioned, the Spanish case has its own particularities, which are addressed in Section 5, dedicated exclusively to an analysis of securitisation in Spain. Finally, we draw some conclusions and offer some views as to how the market may evolve in the coming years.

2 The financial crisis and securitisations

Starting in 2007, the securitisation market, which had experienced extraordinary growth in Spain and the rest of the EU throughout the previous decade,[2] suffered a severe blow in the form of a drastic reduction in amounts issued, as most of its investors disappeared from the market. The market, which had been growing at a remarkable rate thanks to the expansion of the real estate market[3] and the credit market (see Figure 3) – thanks to the fact that financial institutions had found an efficient source of financing in securitisations –, suffered a sharp shock in the summer of 2007, when several international financial institutions announced losses in their investment vehicles and the impossibility of valuing their investments due to the difficulty of obtaining a market value for the assets in which they had invested (related to sub-prime[4] mortgage loans). From then on, investors withdrew from the securitisation market, with the exception of 2008 (when they were massively used by financial institutions to obtain liquidity from central banks), and the market went into a decline, from which ten years on it has still not recovered despite attempts by regulators to revitalise this instrument as a financing mechanism for the economy (see Figures 1 and 2). In the case of Spain, dealt with in detail in Section 5, the decline was due not so much to the problems identified internationally, relating largely to product design and transparency, as to agents' misgivings about the solvency of the banking system.

1 A significant number of investors continue to have doubts about these assets due to the lack of transparency regarding the quality of the information and the assets that make up the securitisations, the complexity of the structures and the information provided, and the asymmetric position they adopt with respect to the issuer and the quality of credit ratings.

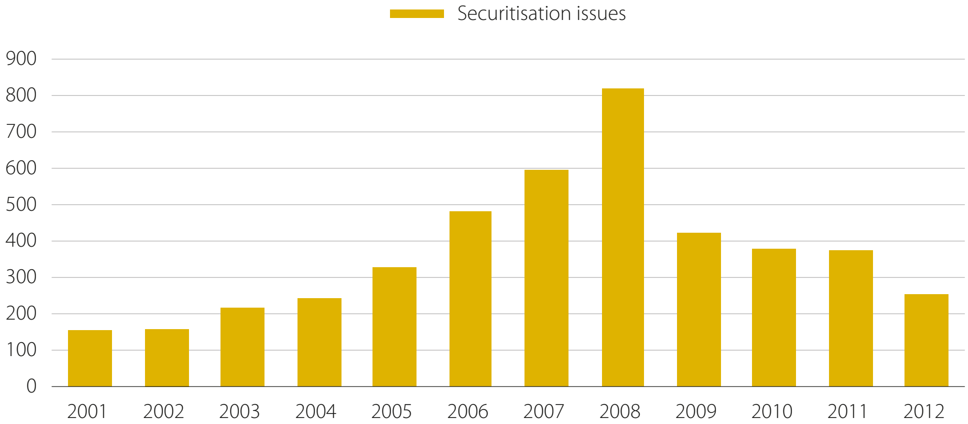
2 The asset securitisation market had grown significantly in the United States since the 1980s, but it was not until the end of the 1990s that it spread strongly in the EU.

3 Statistics from the Bank for International Settlements (BIS) point to a significant expansion in real estate asset prices in all advanced economies in the first few years of this century, including Spain and the rest of the EU.

4 The German bank IKB Deutsche Industriebank had to be bailed out to the tune of €3.5 billion due to the problems of its investment vehicles with sub-prime mortgages, while the Dutch investment bank NIBC Holding suffered significant losses. BNP Paribas, Axa and Union Investments also had problems with some of their funds due to the fall in value of the securitised assets in their portfolios and the difficulty in obtaining market prices for them.

Volumes of securitisation issues in the EU (2001-2012)

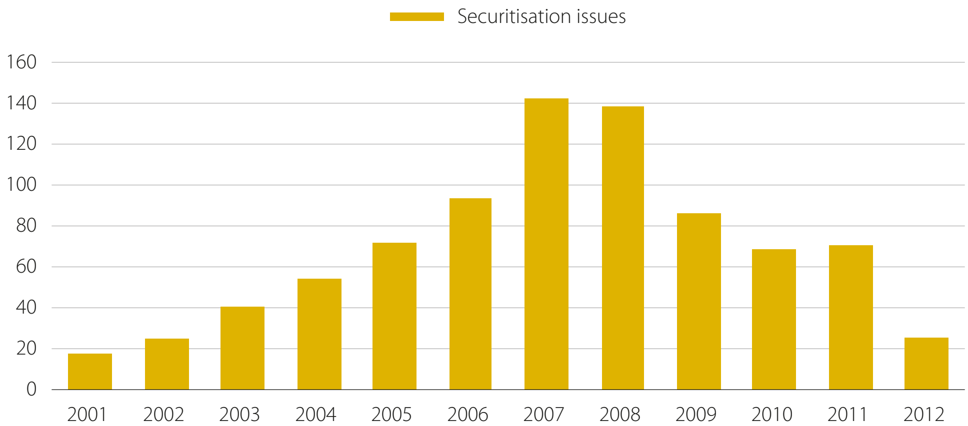
FIGURE 1



Source: AFME. Annual data in billions of euros.

Volumes of securitisation issues in Spain[1] (2001-2012)

FIGURE 2

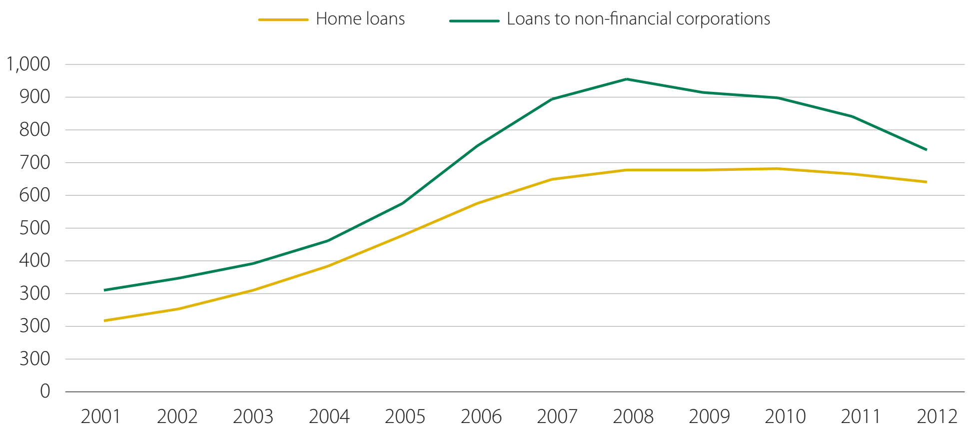


Source: CNMV. Annual data in billions of euros.

1 Issues registered with the CNMV. Includes issues of securitisation notes.

Evolution of the balance of home and business loans

FIGURE 3



Source: Bank of Spain. Annual data in billions of euros.

As Figures 1 and 2 show, during 2008 and 2009 issues continued to reach very high values both in Spain and in the rest of the EU, even exceeding those of previous years, because banks and other credit institutions, the main issuers of this type of instrument, continued to issue them for use as collateral in their financing operations with central banks or within the framework of the liquidity injection programmes established by various EU governments.[5]

In this context, the turbulence in the financial markets intensified in September 2008 after the bankruptcy of Lehman Brothers,[6] which caused strong tensions in the money markets, threatening a strangulation of liquidity, especially in the longer terms, for the financial entities of the euro area. In this scenario, the main central banks including the ECB adopted a series of measures aimed at facilitating access to financing for credit institutions, which from October 2008 included auctions at fixed rates and longer maturities.[7] Among the assets accepted as collateral were securitisations, which were issued in large volumes by EU financial institutions in 2008 and 2009, with the sole purpose of meeting the ECB's criteria for collateral[8] and thus obtaining financing given the impossibility of placing them on the market among investors. Most of the amount of the issues and their tranches was retained on the originators' balance sheets.

The nominal amount of the securitisation securities deposited by credit institutions as collateral and considered eligible assets amounted to just over €700 billion in 2007 (7.6% of the assets considered eligible), later rising to €1.1 trillion and €1.3 trillion in 2008 and 2009 respectively (9.6% and 10% of eligible assets). However, their weight in terms of use as collateral was notably higher, as shown in Figure 4, increasing from 11% in 2006 to 16% and 28% in 2007 and 2008 respectively, despite the fact that securitisations were subject to bigger haircuts[9] than other eligible assets.

Subsequently, despite a certain expansion of the market in some of its segments in the EU[10] (for example, securitisations of car loans), the predominant use during the last decade has been as a means of obtaining financing from the ECB, ranging

5 Among them, financial asset purchase programmes, liquidity injection programmes (such as those carried out in Spain by the Fund for the Acquisition of Financial Assets) and even purchases of impaired assets.

6 Lehman Brothers officially declared bankruptcy on Monday, 15 September 2008 after 158 years of activity due to problems with its sub-prime mortgage securitisations.

7 In addition to EU initiatives to support the banking and financial systems, on 8 October 2008 the ECB the changed the procedure for the weekly main refinancing operations, introducing a fixed rate tender procedure with full allotment at the interest rate. On 15 October, this decision was extended to longer-term refinancing operations against a list of assets eligible as collateral, which was also expanded to include securitisations (see the ECB press release of October 15, 2008).

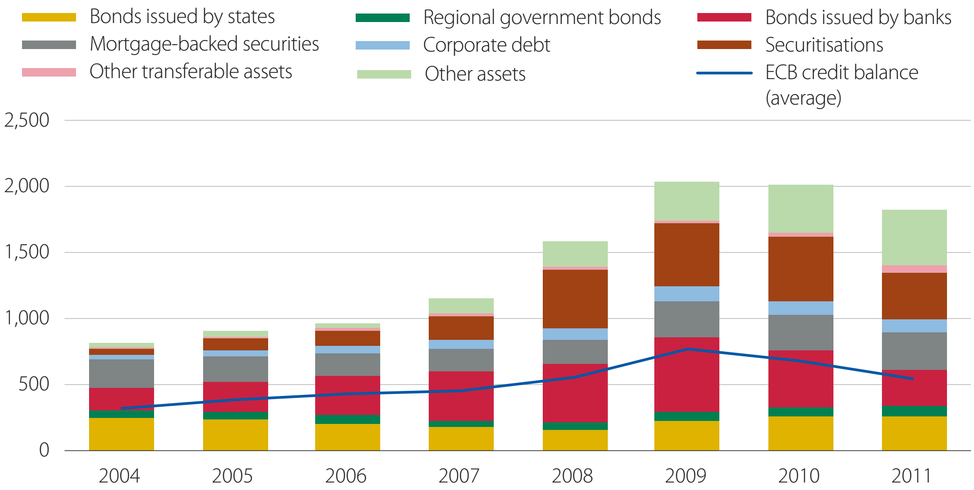
8 Among them, being freely transferable securities; being admitted to trading on a regulated market or on one of the non-regulated markets recognised by the ECB; having been issued, deposited or registered in one of the member countries of the European Economic Area; having the highest rating at the time of issue, and having maintained at least an A rating throughout their life. Securities issued on the basis of synthetic securitisations or re-securitisations are not admitted.

9 Mark-down percentage subtracted from the market value of an asset when it is used as collateral. The size of the haircut reflects the risk associated with the asset.

10 The recovery of the securitisation market has been more intense in the United States, where almost 80% of securitisations benefit from guarantees granted by public agencies such as "Fannie Mae" (the Federal National Mortgage Association) and "Freddy Mac" (the Federal Home Loan Mortgage Corporation).

between 14% and 23% of total collateral assets, so much of the origination activity has been specifically earmarked for this purpose.

The use of collateral to obtain financing from the ECB FIGURE 4



Source: European Central Bank. Annual data in billions of euros.

1 ECB lending balance in annual average of quarterly data.

3 Academic literature on securitisation problems

The academic literature on international securitisation, which initially focused on analysing the causes of its rapid growth in just a few years[11] and the advantages it implied for economic growth and the expansion of financial markets, was reoriented after the outbreak of the financial crisis to explain the weaknesses of this activity and how it could have contributed to aggravating the crisis itself.

Academic research has focused on analysing the impact of the quality of the underlying assets on securitisation structures, the informational asymmetry between issuers and investors, and the role played by the credit rating agencies in the development of this market.

In this regard, the results obtained by the academic literature are not uniform. When analysing the impact of asset quality, some authors such as Krainer and Laderman (2009), Hull (2009), and Kara, Marques-Ibañez and Ogena (2010) say that securitisation may have reduced originators' incentives to carry out detailed analyses of the risk of their loan portfolios since they could be transferred to a third party, but others such as Bubb and Kaufman (2009) claim that financial entities followed the usual analysis process, although they may have relaxed the required credit quality parameters. On the other hand, when the informational asymmetry between

11 The analyses carried out show that the main incentive for originators is the obtaining of funds and liquidity. The works of Greenbaum and Thakor (1987) and those of Pavel and Phillis (1987) include the idea of securitisation as a tool to obtain liquidity and reduce credit and portfolio risk. Other authors even pointed out that securitisation provided additional profitability gains to the entities that carried out this activity.

securitisation issuers and investors is studied, debate centres on whether originators and issuers placed the issues with the worst collateral on the market and retained those with the best on their balance sheets, since they had more information on their quality due to their role as originators. Some authors such as Elul (2009) have noted this possibility in pointing out the worse performance of securitised loans compared with those retained on the balance sheet by the originators,[12] but others doubt such behaviour took place in view of the reputational risk that it could have entailed.

As for the rating agencies, which sometimes took part in the prior process of structuring issues, the studies generally find that excessive trust was mistakenly placed in the statistical risk assessment models used, which underestimated possible adverse scenarios and their effects. In addition, the rating agencies' participation in the structuring as well as the credit rating itself indicates the possibility of a conflict of interest which, while systematically addressed with the strict application of the so-called "Chinese walls", nonetheless raises doubts as to the validity of the ratings.

The literature also indicates that investors' difficulties in accessing information on the quality of the assets backing the securitisations gave a key role to the credit rating agencies, but that these, in turn, were paid by the same party (the issuer) that had assigned these securities as collateral for the securitisation. The rating agencies denied that they had relaxed the requirements for assigning their ratings, pointing to the reputational risk that they would have incurred had they done so, but the main results obtained by the academic literature seem to indicate the opposite. The work of Ashcraft, Goldsmith-Pinkham and Vickery (2010) shows a progressive deterioration of the analysis standards of the ratings which coincides with the increasing growth in securitisations, although it indicates that the tranches with the worst ratings were those that presented the greatest proportional deterioration. For their part, other authors such as Mathis, McAndrews and Rochet (2009), and Bar-Isaac and Shapiro (2010) concluded that the agencies tended to relax their criteria and increase ratings if they were highly dependent on this income, even if this meant partly risking their reputation, which they would rebuild by applying more rigorous procedures in times of crisis.

4 The problems of securitisation and the solutions adopted by regulators

As has already been pointed out, the main problems affecting securitisations internationally derived from the quality of the underlying assets that made up the various securitisation structures, the informational asymmetry between issuers and investors due to the lack of transparency in information, and the role played by the rating agencies.

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12 In the case of the Spanish market, the analyses carried out by various authors such as Carbó-Valverde et al. (2011) note that the existence of securitisation and therefore of risk transfer mechanisms may have helped ease conditions and limitations in access to credit for certain groups compared with previous periods, since these loans presented higher default rates when the economic crisis hit.

All these aspects have been the subject of extensive debate among regulatory bodies, investors and the industry itself, and this has led to the creation of a set of regulatory developments in Europe with the priority aim of correcting the vulnerabilities and excesses seen in the past.

The main problems can be defined under the following headings:

i) **Conflicts of interest between issuers (originators) and investors:** The practice of originating to distribute was used by some entities, in a context of strong growth both in the economy generally and in lending, to develop their financial business thanks to the ease of transferring the risk associated with these transactions. This may have encouraged entities to relax their credit approval standards[13] in order to obtain financial business, given the possibility of easily transferring the risk.

   As a consequence of the asymmetry of information between investors and issuers, as well as the lack of transparency, it became necessary to establish a signalling mechanism on the quality of the assets making up the portfolios in order for investors to regain confidence in these assets. A possible solution to this problem has been the development of prudential legislation that aligns the interests of issuers, originators and investors, so that securitisation originators are obliged to retain a percentage of the risk of the operations. In this way, the originators have to share with the issuers the risk that they have analysed, which will encourage them to be more rigorous in their credit approval procedures.

   With this objective, the Capital Requirement Directive, CRD II, established that banks may not invest in securitisations unless their originators retain at least 5% of the risk. The purpose of this measure[14] is to make the loan originators that usually participate in securitisation markets more rigorous in their credit approval procedures, by obliging them to share the risks with investors, so that the interests of originators and investors are aligned.

ii) **Lack of transparency and complexity of information:** Investors, regulators and the industry itself have repeatedly expressed their reservations in this respect and the need to improve the quality and quantity of available information provided by originators on the loans in the portfolios forming part of the securitisation collateral, as well as on the evolution of their behaviour over time. We must also add to this the high degree of complexity of the structures, which makes them difficult to understand.

   Once again, the amendments to CRD II included a large part of the proposals for improvement, establishing[15] that banks promoting securitisations must ensure that potential investors have access to all relevant data regarding the credit and performance of the exposures to be securitised (including expected cash flows

13 As happened in the United States with the granting of sub-prime mortgages to borrowers with low solvency and low payment capacity.

14 This regulation is applicable to new securitisations generated from 1 January 2011 and to securitisations already existing on that date that substitute or incorporate assets from 31 December 2014.

15 See Note 12.

and credit enhancements) and that all the necessary information is available to be able to carry out a stress test on cash flows and credit enhancements, and inform investors of the level of economic interest that they plan to retain with each securitisation. In addition, the same Directive established the obligation for securitisation issuers to provide sufficient information to investors and the market to be able to evaluate the investments, to which regulations in the same sense have been added by the national regulators themselves[16] and the ECB.[17]

iii) **Complexity of securitisations:** Securitisation structures are more complex than most common financial instruments. Although originally these structures were relatively simple and easy for investors to understand, the rapid development of the market, characterised by strong volume growth, progressively led to the design of structures that were increasingly complex and difficult to understand, so that in many cases investors did not have a clear understanding of the product in which they were investing.

In this regard, the regulators and the industry itself also pointed to the need both to return to simpler structures to restore investor confidence and to increase capital requirements for the more complex structures. In this regard, the EU opted for a series of regulatory developments aimed at restoring investor confidence and reactivating the securitisation market. Thus, within the framework of the Capital Markets Union, in 2015 the European Commission published a legislative proposal that included a new Regulation on simple, transparent and standardised securitisation (STS), as well as amendments to the CRD. The proposal finally took the form of Regulation (EU) 2017/2402,[18] which entered into force on 1 January 2018 (with a transition period until 1 January 2019). This Regulation is intended to promote a market for high-quality assets, while avoiding the problems and bad practices that previously occurred in this market. With this objective, issues classified as STS will enjoy a higher quality and a different regulatory treatment from other securitisations.

Also, 6 June 2019 saw the publication of Regulation (EU) 2019/876[19] on capital requirements, which improves the treatment of STS securitisations in terms of

16 In Spain, CNMV Circular 2/2009 of 25 March as amended by Circular 4/2010, laid down a number of obligations in relation to the periodic reporting provided by securitisation funds which included (through a standardised format) information on the income statement, the balance sheet, the cash flow statement and specific information on the assets (types of assets, outstanding balances, delinquency rates, residual life, etc.) and liabilities of the fund (interest rate, ratings, early repayments, etc.), as well as on the evolution of the fund's credit enhancements.

17 The ECB established a specific reporting mechanism for assets forming part of securitisations used as collateral in its financing operations.

18 Regulation (EU) 2017/2402 of the European Parliament and of the Council, of 12 December 2017, laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation, and amending Directives 2009/65/EC, 2009/138/EC and 2011/61/EU and Regulations (EC) No. 1060/2009 and (EU) No. 648/2012.

19 Regulation (EU) 2019/876 of the European Parliament and of the Council, of 20 May 2019, amending Regulation (EU) No. 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No. 648/2012.

capital, which should free up resources for financial institutions and improve their ratios.

In short, the aforementioned changes are aimed at developing a broad, safe and liquid securitisation market that is capable of generating a broad base of investors and that becomes an efficient mechanism for providing financing to the economy (both for banks and for other entities such as insurers), in which STS securitisations are conceived as an element to revitalise this market, while at the same time efficiently transferring risks to a group of institutional investors, but protecting investors and properly managing systemic risk.

Simple, transparent and standardised (STS) securitisations EXHIBIT 1

Simple, transparent and standardised (STS) securitisations are regulated by Regulation (EU) 2017/2402,[1] which establishes a general framework for securitisations and a specific framework for STS securitisations. This Regulation, which entered into force on 1 January 2019, has as its main objective the reactivation of the European market for high-quality securitisations, in such a way that it contributes to facilitating the financing of the real economy of the EU while at the same time allocating and transferring risks more efficiently, and protecting investors.

With this approach, a framework is developed to simplify the rules relating to all securitisations and to identify those that meet the characteristics of being simple, transparent and standardised. This includes the following aspects:

– Definitions of the fundamental concepts of a securitisation.

– Requirements regarding due diligence, risk retention, transparency and criteria for the granting of credits.

– Restrictions on the sale of securitisations to retail customers.

– Prohibition of re-securitisations.

– Establishment of standards for the development of securitisation special purpose vehicles,[2] as well as securitisation repositories.[3]

– Development of a structure for STS securitisations.

– Creation of a system of administrative sanctions for cases of non-compliance.

The regulations have a direct effect on both issuers and investors, the most important aspects of which affect the origination, development and distribution of securitisations from the issuers' point of view, but also the assessment of risks and the suitability of the product from the point of view of investors. In the case of issuers, it establishes, on the one hand, the obligation to retain a net economic interest of at least 5% of the securitisation, which partially limits the transfer of risk, as well as the need to apply the same solid and well-defined criteria to the granting of credit as are applied to non-securitised products, helping to reduce moral hazard issues on the part of issuers; while, on the other hand, the obligation to provide detailed information on the securitisations is established both to the holders of securitisation assets and to the competent authorities and potential investors, so that they have all the information necessary to evaluate their investments and levels of transparency are substantially increased. As compensation, issuers will be able to use the term STS to denominate their issues when they meet the requirements established for this purpose, which will facilitate their marketing among investors compared with other more complex securitisations, as well as a lighter treatment in terms of capital requirements.

The elements that define an STS securitisation are the following according to each of the three characteristics:

– **Simple:**

  i) Assets[4] that form part of the securitisation must be homogeneous[5] to facilitate their evaluation and risk assessment.

  ii) Re-securitisation is not allowed.

  iii) Loans must have sufficient history to be able to make reasonable estimates of the risk of default.

  iv) Ownership of the credits must have been fully transferred to the issuer of the securitisation.

– **Transparent and standardised:**

  v) The securitised loans must have been generated using the same standards as for any other loan. This is intended to avoid the originate-to-distribute model and to avoid the selection of specific credits for securitisation.

  vi) At least 5% of the credit portfolio must be retained by the originator.

  vii) The documentation must be complete, include details on its structure and the cascade of payment flows generated by the securitisation, and contain the sequence and amount of payments assigned to each tranche.

  viii) Information on the loan portfolio that is part of the securitisation must be made public on a regular basis.

  ix) The contractual obligations, commitments and duties of all parties that are key to a securitisation must be clearly defined.

What assurances are there that a securitisation meets the criteria to be considered STS?

The issuer of a securitisation designated STS must ensure that it meets all the criteria to be so designated and must notify the European Securities and Markets Authority.[6] (ESMA), so it is legally liable for any erroneous information provided. ESMA itself will include the securitisation in a centralised data registry which will include all the securitisations (traditional and synthetic)[7] that receive the STS label and which will be accessible online to all investors free of charge.

The issuer, the originator and the sponsor of securitisations will all be responsible for providing investors with all the relevant information necessary to assess the risks associated with each of them. Also, all this information will be brought together on the ESMA website in a section dedicated to securitisations[8] under a standardised format. Apart from this, since securitisations involve different agents (originators, sponsors, issuers, investors, etc.), the competent authorities of each area will supervise the securitisation activities that fall within the scope of their powers, establishing a system of sanctions in case of non-compliance, as well as their exclusion from the STS securitisation register.

1 Amended by Regulation (EU) 2021/557 (SECR).
2 Securitisation Special Purpose Entities (SESPE).
3 Securitisation repositories will need to be registered with ESMA and will need to collect and maintain all securitisation data to make them available to investors and competent authorities.
4 Usually mortgages, loans or accounts receivable.
5 For example all residential mortgages, or all commercial mortgages or loans for the purchase of vehicles, but not combining different types of risk.
6 ESMA regulates securitisation activities basically establishing reporting requirements, including the content of STS securitisation notifications, as well as maintaining a register of STS securitisations. It also supervises securitisation registries and facilitates cooperation in supervision among the various competent authorities.
7 Synthetic securitisations incorporate derivative instruments to transfer risk.
8 ESMA has maintained a current register of STS securitisations on its website since 1 January 2019.

iv) **Deficiencies in evaluation on the part of investors:** Added to the complexity of securitisation structures was the fact that the people investing in them[20] nearly always delegated the evaluation and analysis process to rating agencies, and this was exacerbated by the dynamics of a market with strong growth and high demand for this type of asset.

In this regard, regulatory initiatives have focused on promoting an active role for securitisation investors, in the analysis of both securitisation securities and their collateral at the time of their acquisition and their subsequent monitoring. Thus, once again, the amendments to CRD II included the need for credit institutions to demonstrate to the competent authorities that they comply with the appropriate procedures and policies to carry out the prior analysis of their investments, as well as their subsequent monitoring, taking into account

20 The securitisation market is basically wholesale, so its investors are institutional, with extensive knowledge of the markets and their financial instruments.

aspects such as the risks associated with the operation and the assets themselves, guarantees, analysis of the originator of the operation and the methodology used. Entities must therefore ensure that their investments in securitisations have been correctly evaluated[21] and are appropriately monitored, since otherwise, the risk weightings of these operations will be penalised with a higher cost in terms of capital.

v) **The role of the rating agencies:** The market, in which investors made their investment decisions based on the reports issued by these agencies, as well as the regulations themselves, which contributed to skewing credit ratings upwards, had given rise to a business model for securitisations that was highly dependent on the rating agencies and which was called into question with the outbreak of the financial crisis. All the criticisms point to poor risk assessment by the agencies, with excessive faith in the evaluation models used and, in particular, to the low probabilities that they assigned to the default scenarios, as well as the complexity and lack of transparency of the methodology applied to their analyses.

Regulation (EC) No. 1060/2009 and its subsequent amendments[22] introduced a set of regulations aimed at correcting these excesses in relation to securitisations, emphasising the obligation of the credit rating agencies to make public their models, methodologies and assumptions for granting ratings, as well as the ratings themselves, in addition to the need to review them at least once a year or when there are substantial changes that imply a variation in credit quality. The agencies must also ensure that their ratings are not affected by any conflict of interest or any commercial relationship, so they may not provide advisory services, and the remuneration of their employees may not be linked to income obtained by the agency based on the ratings granted.

5 Securitisation in Spain after the financial crisis

Despite the fact that securitisations continued to play a notable role after the outbreak of the financial crisis as a mechanism for financial institutions to obtain funding from central banks, the massive withdrawal of investors from the market caused their decline, which led to volumes of issues at the beginning of the decade from 2010 to 2020 being at levels similar to those of the beginning of the previous decade.

Since then, despite the various reforms and attempts by regulators to revitalise this instrument, its recovery has been slow and costly, still far from the levels reached before the financial crisis, as reflected in issue volumes. Thus, in the case of the Spanish market, securitisations, which in 2007 represented 69% of all long-term issues registered with the CNMV,[23] fell to a low of 11% in 2012 and have since reached

21 To this end, they may rely on external valuation models developed by an external rating agency, but they must demonstrate that they understand the model and its assumptions and results.

22 Amended by Regulation (EU) No. 513/2011.

23 In 2008, they reached an all-time high of 82%, as they were massively used by financial institutions as collateral to obtain liquidity from central banks.

annual values of between 21% and 30%, with a high of 33% in 2020 (see panel a) of Figure 5).

Likewise, as shown in panel b) of Figure 5, Spanish securitisation issues, which came to represent on average almost a fifth[24] of all the securitisations issued in Europe between 2000 and 2010, have progressively lost weight over the last decade, reaching an average of around 13% of the total, although a notable recovery was observed in 2020.

As has been commented in previous sections, the decline in securitisation in Spain was not much related to the problems observed internationally deriving from the originate-to-distribute model, in view of the low default and NPL rates of Spanish securitisations and the fact that most Spanish financial institutions – their main issuers – kept the assets on their balance sheets. In Spain, securitisations were used as a mechanism for obtaining liquidity. Spanish issuers, unlike those in the US and some European markets, continued to be linked to their own issues, keeping practically all the securitisation tranches on their balance sheets, and there is no evidence of their having made biased use of the information they had about their credit portfolios to the detriment of potential investors.

Thus, in the specific case of the Spanish market, investors' withdrawal from this instrument could be attributed not so much to the behaviour and composition of the Spanish securitisations themselves, which also had credit enhancement mechanisms, as to the doubts existing in the market about the instrument itself, irrespective of originators' jurisdictions, doubts which in Spain were amplified by investors' uncertainty as to banks' solvency[25] and the sharp fall in price of the real estate[26] that made up the collateral of many of the securitisations. In fact, although securitisations may have contributed to increasing the risk assumed by financial institutions before the crisis, by allowing them to grow and increase the size of their balance sheet through credit expansion, it does not seem that Spanish institutions transferred the risks[27] assumed to investors in securitisation bonds, since the default

24 In the period between 2000 and 2010, securitisations issued in Spain represented an average of 19% of all securitisations issued in Europe, with a maximum of 24% reached in 2007.

25 According to the report of the Fund for Orderly Bank Restructuring (FROB) *10 years of the FROB 2009-2019. A decade of financial stability*, accounting for aid from the FROB, the Deposit Guarantee Fund (FGD) and the Management Company for Managing Assets from Bank Restructuring (SAREB), rescue processes have been managed for entities in the Spanish financial system for the following amounts in millions of euros: BFA-Bankia (22,424), Caixa Catalunya-Catalunya Banc (12,599), Caja de Ahorros del Mediterráneo (12,474), NovaCaixaGalicia (9,404), Banco de Valencia (6,103), Caja Castilla-La Mancha (4,215), Unnim (2,897), SAREB (2,192), BMN (1,645), CEISS (1,559), CajaSur (1,192), Banca Cívica (977), Caja3 (407), Banco Gallego (245) and Liberbank (124). To this amount must be added the debt assumed by the SAREB, which absorbed a large part of the assets that were awarded from the financial institutions with the aim of cleaning up their balance sheets and which was established with a debt of €50.78 billion, of which at the end of 2020 around €35 billion remained alive.

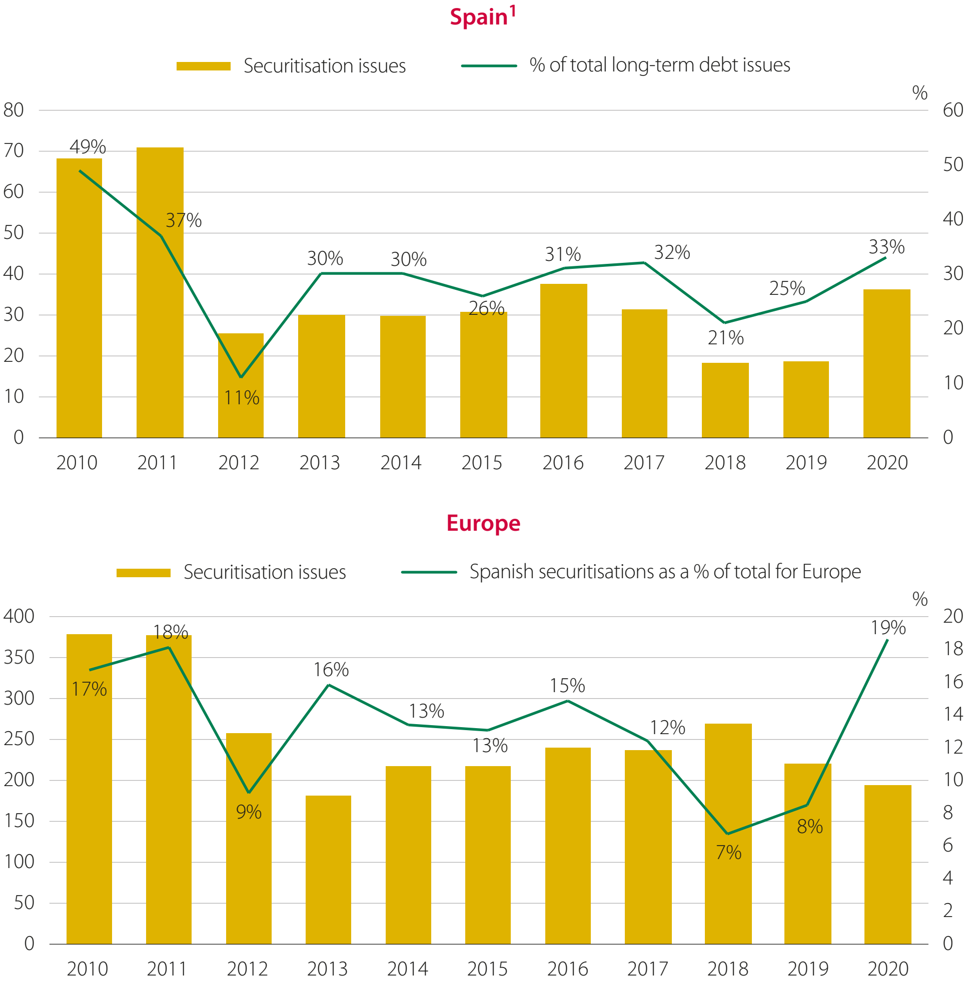
26 The SAREB, popularly known as the "bad bank", was created in 2012 to manage and sell the foreclosed problem assets of the rescued financial entities. Between 2012 and 2013, it acquired almost 200,000 loans and properties from these entities, which included loans of various quality with mortgages and other real estate collateral.

27 Entities transferring assets to a securitisation fund guaranteed that, at the time of their transfer to it, they were up to date with their obligations or that they would have a maximum (technical) overdue position of less than 30 days.

rates associated with these were at levels substantially lower than those of other jurisdictions.

As Figure 5 shows, despite the loss of investor interest in securitisations, from 2013[28] until now, on average, these have represented 15%[29] of all issues registered by Spanish issuers both with the CNMV and abroad, thus maintaining a significant role as a financing mechanism, above other types of assets such as covered bonds and commercial paper. Despite this relatively high percentage of total issues, financial institutions have not used securitisations as a financing mechanism to distribute among investors or as collateral in their financing operations with the ECB, but rather to keep in portfolio in case it needs to be used as collateral with the ECB.

Volumes of securitisation issues (2010-2020) FIGURE 5



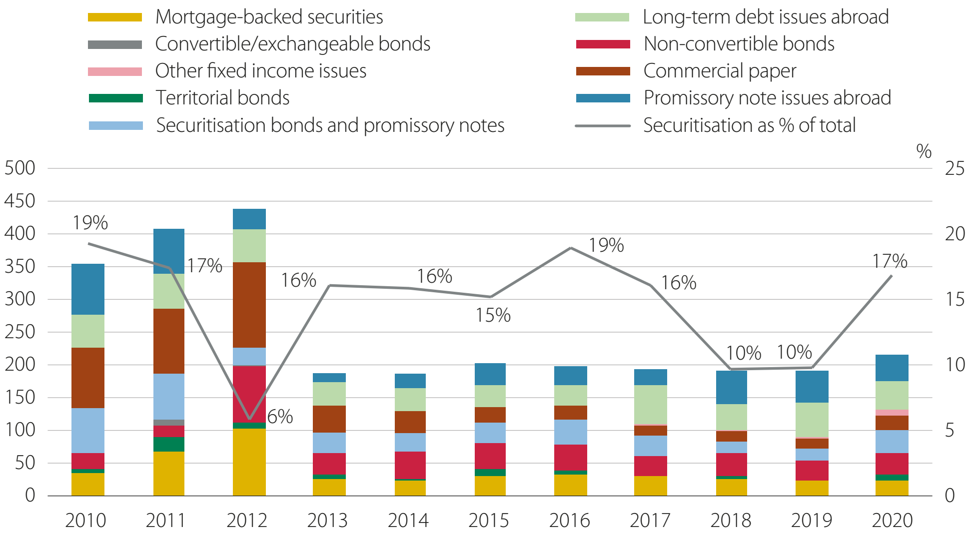
Source: CNMV and AFME. Annual data in billions of euros.

1 Issues registered with the CNMV. Includes issues of securitisation notes.

28 In 2012 they represented only 6% of total issues.

29 Their weight as a financing mechanism has fluctuated between lows of 10% in 2018 and 2019 and highs of 17% and 19% in 2020 and 2016 respectively.

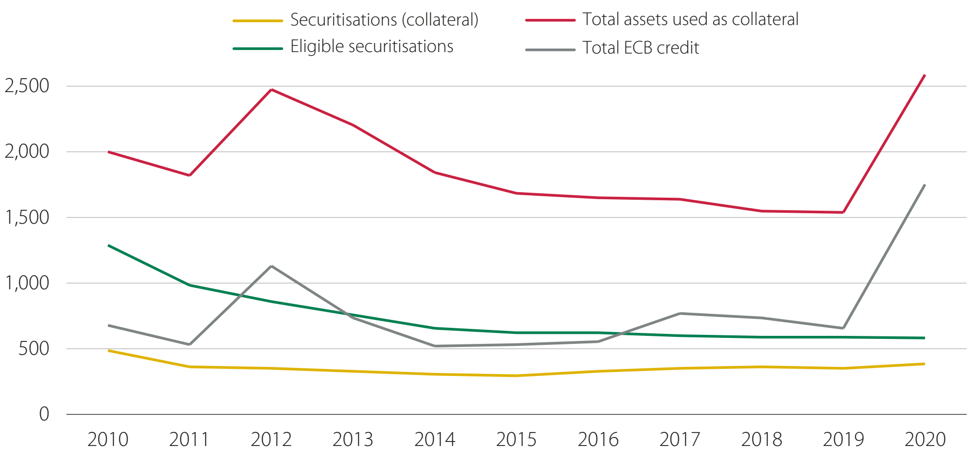
Debt issues of Spanish issuers, by type of asset FIGURE 6



Source: CNMV and authors. Annual data in billions of euros.

Figure 7 shows that the use of securitisations as collateral with the ECB, which set a record in 2010, gradually decreased until 2015, when it reached a low of €293 billion, and since then has been recovering until reaching a high of €387 billion in 2020. Even so, despite its greater use as collateral in recent years relative to the volume of eligible securitisations, which itself has not stopped falling, reaching just over €583 billion in 2020, its lowest volume in recent years, as a proportion of total assets used as collateral with the ECB, securitisation is decreasing and currently represents barely 15%.

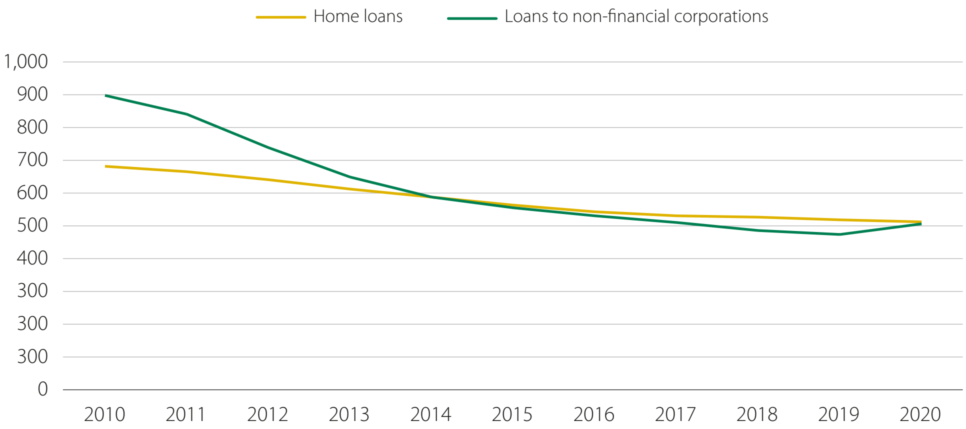
Use of securitisations as collateral with the ECB to obtain financing FIGURE 7



Source: European Central Bank. Annual data in billions of euros.

Apart from this, contrary to what happened at the beginning of the 2000s, when both business and home loans were growing at high rates, in the following decade both fell significantly (see Figure 8). Business lending fell as a result of the greater restrictions on bank lending and the rise of financial disintermediation, which led to many companies directly tapping the capital markets to finance themselves, while home loans fell initially as a result of the decline in activity in the real estate market and later due to buyers' greater use of own funds to the detriment of bank financing.

Balance of home and business loans (2010-2020) FIGURE 8



Source: Bank of Spain. Annual data in billions of euros.

The following sections contain an individual analysis of the behaviour of securitisation issues in Spain with reference to the main aspects affecting them, such as issuing activity, the composition of the various structures and their behaviour in the secondary market, taking into account the most important variables affecting each of them. The intention of this analysis is to identify the changes that have been most significant in this period and to establish whether these changes have been consolidated over time.

Also, although they still have only a limited history, a brief analysis of the characteristics of Spanish STS securitisations has been included in their most outstanding aspects since their approval in 2019.

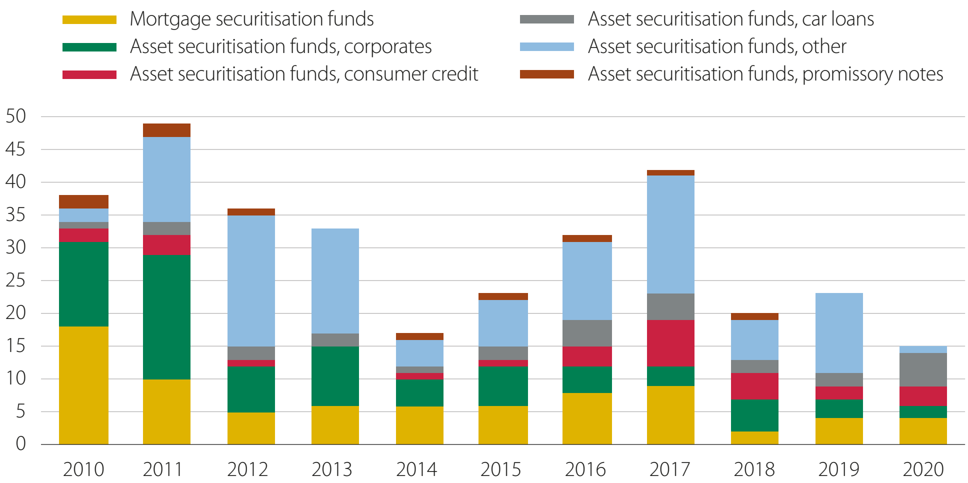
5.1 Issuing activity

5.1.1 Trend in the number of new issues of securitisation funds by type of asset transferred

Although securitisation funds in Spain had been largely linked to the growth of the real estate market and mortgage lending, which accounted for a large number of the issues and much of the volumes of new securitisations,[30] the outbreak of the financial crisis and the strong correction of prices and activity in the real estate market that occurred in the following years caused a change in issuing activity from 2010. Since then, issues of mortgage-backed securitisation funds have progressively lost weight in number and, after a brief transitory recovery in the middle of the decade, the number of mortgage-backed securitisation funds remains at low levels (see Figure 9).

30 One of the initial objectives of Law 19/1992 of 7 July on the Regime of Real Estate Investment Companies and Funds and on Mortgage Securitisation Funds was to favour financing for the purchase of housing and to reduce its cost.

Number of asset securitisation funds registered by type of asset transferred (2010-2020) FIGURE 9



Source: CNMV. Annual data in number of funds.

The number of issues of corporate credit securitisation funds has also progressively lost weight, reaching very low values, while the activity of commercial paper securitisation funds has maintained token levels.

On the other hand, both consumer credit and car loan funds showed signs of revival in the middle of the decade as investors were attracted by their relatively high returns.[31]

In addition, a notable feature throughout the decade was the number of issues backed by other, non-mortgage, loans under agreements between management companies and public administrations for the creation of securitisation funds[32] with state guarantees in order to favour the financing of certain economic activities.

5.1.2 Changes in the nominal amounts of new issues of securitisation funds by type of asset transferred

Although the data in the foregoing section on issues by number of new funds registered with the CNMV might convey the impression that both mortgage securitisation funds and corporate loan funds lost weight in the decade from 2010 to 2020 to the benefit of other types of funds, the nominal amounts issued show that in reality this was not the case.

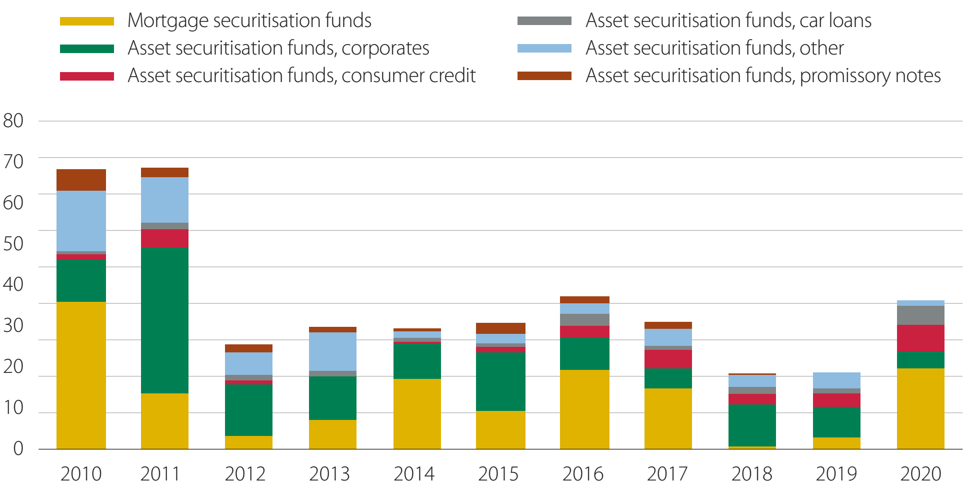
Although the number of new funds of, both mortgages and corporate loans fell and showed very modest figures, in terms of nominal volumes issued, a large part of the issues continued to be concentrated in real estate assets and business loans. Consequently, it can be deduced that the average size of these types of securitisation funds

31 In a context of recovering economic growth, expanding consumption and very low interest rates.
32 Such as the Electricity Deficit Amortisation Fund (FADE), the securitisation vehicle for the tariff deficit receivables arising from the difference between revenues and costs of regulated activities of the electricity sector.

registered has increased significantly. However, there is no steady growth over time and, with the exception of 2016 and 2020, in which the volume issued grew significantly, amounts issued since 2012 have not reached €30 billion per year and there are no clear signs that this trend is going to change (see Figure 10).

Also, while there has been a greater increase in the number of funds registered in other categories, the average volume issued per fund has not only not grown but has actually reduced somewhat. This could be a reflection of managers' attempts to encourage the recovery of the securitisation market by creating smaller funds of specific types of assets (such as car loans or loans guaranteed by the public administrations) that might appeal to specific groups of investors.

Nominal amount of issues of securitisation funds by type of asset transferred (2010-2020) FIGURE 10



Source: CNMV. Annual data in billions of euros.

5.1.3 Changes in the nominal amounts of assets assigned to securitisation funds by type of assignor

As was the case in the 2000s, the main promoters of securitisation funds in Spain continue to be financial institutions,[33] which from 2011 to 2020 have represented 87% of the market, a percentage that rises to 91% for the period since 2015. Therefore, the weight of these agents in the market remains relatively stable over time, maintaining values above 90% in the last 25 years. The rest, which barely reaches 10%, corresponds mostly to non-financial companies, some of them public (see Figure 11).

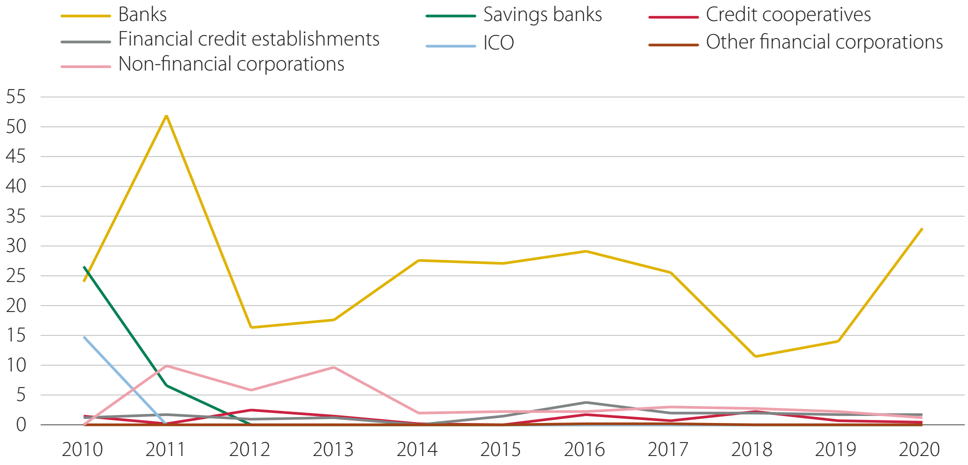
Assets assigned by banks, savings banks[34] and credit cooperatives from 2011 to 2020 reached €271 billion, placing the average annual amount at just over €27 billion. Of the total amount, around 40% corresponded to mortgage loans and 43% to corporate loans, while the rest was used for various types of consumer finance.

33 Including banks, savings banks, credit cooperatives and financial credit establishments.

34 Until 2011. Since 2012, all assets contributed by financial entities have corresponded to banks.

Consumer credit securitisations reached an average of around 5% of all securitised assets in the last decade, but in recent years their weight has been growing and in some years they have accounted for around 10% of total securitisations.

Nominal amount assigned to securitisation funds by type of assignor (2010-2020) FIGURE 11



Source: CNMV. Annual data in billions of euros.

Likewise, we would highlight the role of non-financial corporations, which contributed on average more than 12% of all securitised loans throughout the decade, albeit far below the values of close to 25% or more reached at the beginning of the decade with the restructuring of the financial sector.

5.2 Quality of securitised assets

A key element determining the future behaviour of a securitisation fund is the quality of the underlying assets. As mentioned above, one of the common criticisms of the securitisation model that existed before the outbreak of the financial crisis was that it was created from the bad practice of originating credits to distribute them in the form of securitisations without carrying out an adequate evaluation of their quality. The application of this business model may have led some entities to relax their credit approval standards in order to develop their financial business thanks to the ease of transferring the risk associated with these transactions.

The usual metrics for measuring the quality of a securitisable asset vary depending on the type of asset, but are basically the age and maturity of the loans and the NPL[35] and default rates in the case of mortgages and business loans, while for consumer loans and car loans only the last two parameters are taken into account.

35 The NPL (non-performing loan) rate includes doubtful loans (when more than 90 days have elapsed since their non-payment) and those where, although this period has not elapsed, the entity has reasonable doubts as to whether they will be repaid.

In the case of mortgage loan portfolios, the age and maturity of the securitised loans are key to assessing the quality of the risk transferred to the securitisation. Statistical experience indicates that the behaviour of the first years of a loan (between three and five years) is key in relation to its probability of default, which gradually reduces from that moment on. Likewise, although there are no regulations establishing how old loans transferred to a fund must be, it has been shown that the sooner a loan is transferred from the balance sheet of a financial entity to the fund, the less information will be available on its credit history to assess its quality, so its having been on the entity's balance sheet for a minimum time and a history of its credit behaviour will increase transparency as to its presumed quality. In addition, in the case of mortgage loans, another very important metric is the loan-to-value (LTV) ratio, which reflects the relationship between the outstanding balance of the loan and the last appraisal of the home, either at the time the loan was granted or at the time of its securitisation. Empirical evidence shows that loans with the highest LTV ratios are more vulnerable because, in the event of a fall in the prices of real estate assets, the probability of default increases as a result of the debtor's increased leverage.[36]

Mortgage securitisation funds provide information to investors and rating agencies on the evolution of all these parameters, so that they can carry out an analysis of the credit quality of the underlying assets. In addition, in the Spanish case, in order to guarantee the quality of the assets assigned to a fund, they must be up to date with their obligations at the time of assignment.[37]

As in the case of mortgage loans, the age and maturity of the securitised loans are key elements in determining the risk of a business loan securitisation. However, contrary to mortgage loans, where in the last two decades a progressive lengthening of terms has been observed, in the case of companies, the financial crisis meant a tightening of the credit conditions granted to them and a decrease in terms of their loans, which reduces their credit history before transfer to the funds' loan portfolios and therefore the quality of the information regarding them. The delinquency of loans to companies also varies with the sector in which they operate, which may be more or less sensitive to economic cycles and periods of recession, as well as with the size of the company, since small businesses tend to be more vulnerable, as they have weaker financial structures and are more dependent on bank credit.

5.2.1 Evolution of the structures of securitisation issues based on their credit rating

Asset securitisation funds can issue different series of bonds depending on the level of risk associated with each of them, which will depend on the specific characteristics of the series, such as the position it occupies in the order of priority of payments,

36 Moody's in its report "Approach to Rating Spanish RMBS" (2013) assigns a default frequency of 25% to loans with an LTV ratio of 100%, which falls to 11.5% when the LTV is reduced to 80%. Also, see the work of María del Rosario Martín (2014). *Análisis de los fondos de titulización españoles: características en el momento de su constitución y comportamiento durante los años de la crisis* ("Analysis of Spanish securitisation funds: characteristics at the time of their constitution and behaviour during the crisis years") in which this same idea is corroborated with an analysis of securitisation fund portfolios for the Spanish market.

37 Although assets that are less than 30 days overdue (technical overdue) are admitted.

the repayment period and the size of the series, as well as the intrinsic characteristics of the loan portfolio that make up the fund's assets.

The number of tranches that make up a securitisation fund will depend on the characteristics and homogeneity of the portfolio of assets included in it, as well as the type of investors[38] to whom it is addressed, but also to some extent on the needs of the structurer of the fund.[39] Typically, a fund is structured with one or two series of tranches with the highest credit ratings (A or higher) – commonly referred to as the senior tranche – and with several subordinate series of smaller size with a lower rating or even unrated – called equity tranches – and whose main characteristic is that they have to face the first losses of the fund's asset portfolio.

As mentioned above, most of the securitisations issued since the outbreak of the financial crisis have been conditioned by their use as collateral in financing operations with the ECB, which has largely determined the structure and composition of their series (see Figure 12). Thus, although initially the ECB[40] established that the securitisations used as collateral would have to have a credit rating of AAA, the rapid deterioration of the ratings and of the underlying assets themselves as a result of the financial crisis led the ECB to progressively relax its criteria on the credit quality of the assets accepted as collateral, eventually reducing them to BBB,[41] a minimum requirement that remains today.[42]

Thus, while in the first stage after the outbreak of the financial crisis practically all the funds issued were rated AAA, by 2012 as a result of the ECB's gradual relaxation of rating requirements, most issues were rated AA or lower, allowing financial entities to free up their higher quality assets for other purposes such as issuing covered bonds or other instruments.[43] Even so, as shown in the figure, most of the securitisation funds issued during almost the entire decade have had high quality ratings of AA or A and lower rated issues have been limited. Likewise, the improvement in delinquency ratios in the last years of the decade, as well as the interest of some investors in adopting higher risk positions, have allowed a greater duality of ratings in the last three years, with the size of the highest quality tranches (AAA) and the highest risk tranches (rated B or lower) both increasing, to the detriment of series with intermediate ratings.

38 It has been found that as the degree of sophistication of securitisation fund investors increases, they tend to be structured in more tranches to accommodate the objectives and needs of the different investors.

39 Since the outbreak of the financial crisis, it has been observed that the number of series issued by funds has fallen, since many of the tranches of the issues or even all of them are retained by the originator for use as collateral with the ECB.

40 In January 2009 the governing council of the ECB established a minimum rating of AAA.

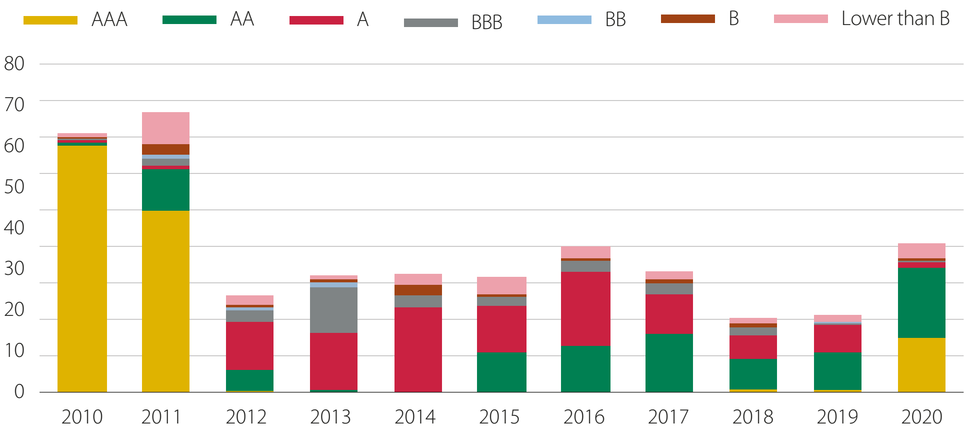
41 The conditions were made more flexible in several stages and in June 2012 a new minimum rating of BBB was established, although the haircut applied to the valuation of securitisations is conditional on the type of assets that make up their portfolios, increasing in the case of consumer or business loans.

42 In the COVID-19 crisis, this minimum requirement level was maintained at BBB.

43 Such as territorial or internationalisation bonds.

Structure of securitisation fund issues by rating (2010-2020)

FIGURE 12



Source: CNMV. Annual data in billions of euros.

5.2.2 Mechanisms to improve the quality of securitisations

The agents that structure securitisations have mechanisms that allow the quality of the bonds to be improved beyond that based on the portfolio of assets that back them (credit enhancement). In this way, the credit enhancements absorb the first losses that the asset portfolio might incur, thereby protecting both the securitisation bonds and the investors.

Usually, the size of the credit enhancements necessary for the securitisation bonds to achieve the desired rating is determined by the rating agencies, which use simulation models assuming probabilities of default and of recovery of the securitised assets.

Apart from the usual mechanism of establishing subordinated tranches, in which the various tranches of the fund attend to their payment obligations following the order of priority,[44] the most common credit enhancement mechanisms are:

i) **The reserve fund:** This mechanism is based on a cash deposit intended to assume the first losses in the event of possible non-payments of the fund's asset portfolio, so that it can meet its payment obligations to investors. Its amount is usually determined by the rating agencies and is calculated as a percentage of the initial amount of the total issue, which subsequently decreases based on the outstanding balance of the issue in accordance with an amortisation rule described in the issue prospectus of each fund.

   The reserve fund is usually financed by a subordinated loan granted by the originator itself and whose payment priority order is subordinated to all the bonds issued by the fund. Likewise, it could also be financed by the most

44 In this way, the most senior bond tranche is attended to first, followed by the various tranches (A, B, C, etc.) following the order of priority. In the event that there are not enough funds to cover all the tranches of the bonds, the most subordinated tranche will be the first to be unpaid.

subordinated tranche of the issue and, in some cases, part of the fund could come from the excess spread generated in the operation (see point ii).

ii) **Excess spread:** This consists of the difference between the return on the fund's assets and the cost of its liabilities, being the first cushion available to absorb possible losses that the fund may have. In many cases the fund has a swap[45] that eliminates the base risk that could exist if the asset portfolio is referenced to an index other than the one to which the bonds are referenced. On the other hand, once all the payments of the bonds of the fund have been paid in accordance with the established priority order, if there is an excess spread, this would usually be received by the originator.

iii) **Liquidity lines:** These are lines of credit that make it possible to cover the temporary gaps that may arise between the periodic payments to investors and the collection of interest on the underlying assets.

iv) **Over-collateralisation:** This credit enhancement mechanism[46] implies that the assets backing the bonds issued by the fund have a higher nominal amount than the bonds themselves. Rating agencies usually calculate the amount of over-collateralisation based on the potential losses and financial expenses of the liability, so it is usually dynamic based on the credit situation of the asset portfolio.

v) **Guarantees:** This involves a third party, generally an insurance company,[47] granting a guarantee for a certain tranche of the fund in exchange for a premium. This guarantee allows the credit rating to be improved.

The use of the various credit enhancement mechanisms by securitisation fund structuring agents in Spain has not been homogeneous, but has tended to focus on the mechanisms for establishing subordinated tranches and creating reserve funds. However, funds usually have more than one credit enhancement mechanism and the use of the different mechanisms has evolved over time (see Figure 13).

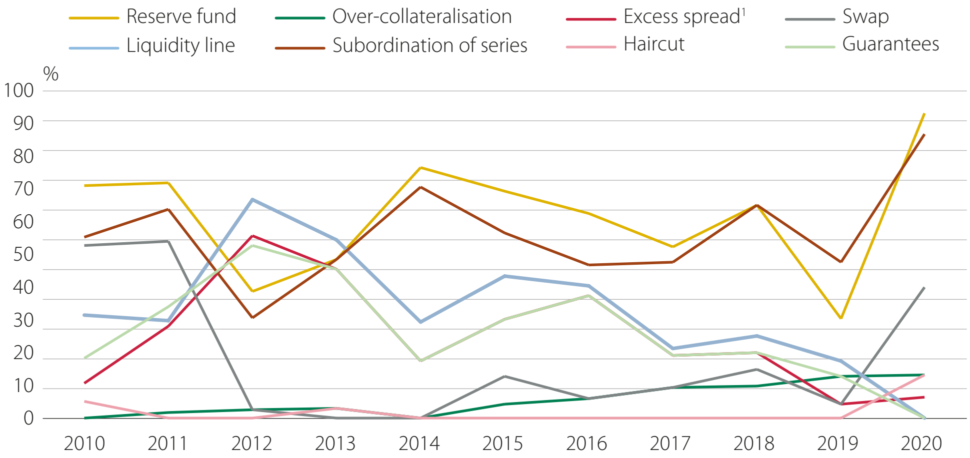
As Figure 13 shows, the use of credit enhancement mechanisms was more common in the years following the financial crisis, but as time has gone by, their use has declined because many of these securitisations were intended as collateral for the ECB, which, as previously mentioned, has gradually relaxed its minimum rating requirements. Even so, the data for 2020 reflects a significant recovery in the number of credit enhancements applied as a result of the increased perception of risk after the outbreak of the coronavirus pandemic.

45 In some cases, swaps incorporated into securitisation operations guarantee a certain excess spread.

46 This mechanism is characteristic of accounts receivable securitisation funds, but can also occur in other types of assets.

47 Usually a monoline, an insurance company covering credit risk linked to financial instruments.

Percentage of new securitisation funds by type of credit enhancement (2010-2020) FIGURE 13



Source: CNMV.

1 Transactions are considered without swap.

The usual credit enhancement mechanisms have been the establishment of subordinated tranches and the creation of a reserve fund, one or the other or in many cases both. The data show that in the 2010-2020 period, on average, more than 60% of the new funds registered had a reserve fund to be able to face the first losses in the event of non-payment of the fund's asset portfolio. And more than half (56%) of the new funds in this period were structured with subordinated tranches. The remaining mechanisms have seen uneven use, with changes over time largely reflecting market circumstances. Thus guarantees, liquidity lines and excess spreads, which were very common in the years following the outbreak of the crisis as credit enhancement tools, gradually lost out as the economic and financial situation improved in the middle of the decade, to other lower-cost measures such as the establishment of over-collateralisation mechanisms, haircuts and the incorporation of swaps.[48]

5.2.3 Coverage of securitisation credit enhancements

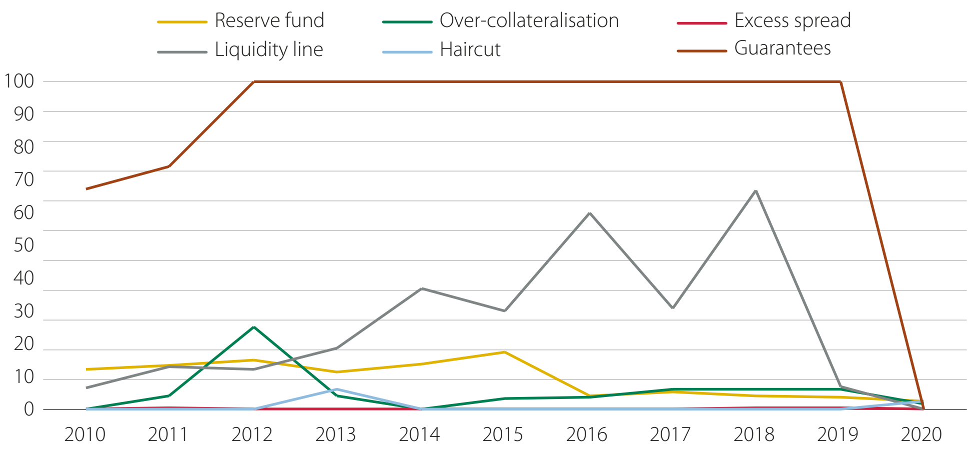
Unlike the establishment of subordinated tranches, which do not in themselves entail additional coverage of credit risk or an improvement in price, but the establishment of a structuring in the order of priority in the event of default, credit enhancement mechanisms imply the provision of additional guarantees to cover the first losses that the portfolio of assets might have.

As noted above, the most common mechanism of this type is the reserve fund, since only a relatively small number of funds have additional mechanisms. The size of the cover provided by the reserve fund has evolved over time (see Figure 14) reaching its peak in the middle of the decade from 2010 to 2020, but as noted above, it has decreased as the ECB has reduced its minimum rating requirements for securitisations for use as collateral.

48 Interest rate swaps, mostly intended to protect asset securitisation funds from interest rate risk, in a scenario of very low and even negative rates.

Although used much less, most credit enhancement mechanisms, such as liquidity lines and over-collateralisation, improved the extent of their coverage over the decade with the only significant decrease being seen in 2020, coinciding with the recovery in the use of other enhancement mechanisms, such as the establishment of a greater number of subordinated tranches.

Average percentage of credit enhancement coverage (2010-2020) FIGURE 14



Source: CNMV.

5.3 Evolution of the outstanding balances of securitisation funds and their activity in the secondary markets

5.3.1 Evolution of the outstanding balances of securitisation funds by type of asset assigned

The evolution of the balance of securitisation funds in Spain has been closely linked to mortgage lending activity. Thus, the decrease in both the volume of new securitisations and the balance of the volume of outstanding mortgage loans[49] caused the outstanding balance of issues to progressively reduce throughout the decade to less than half, after reaching a balance of close to €450 billion at the beginning of the decade (see Figure 15).

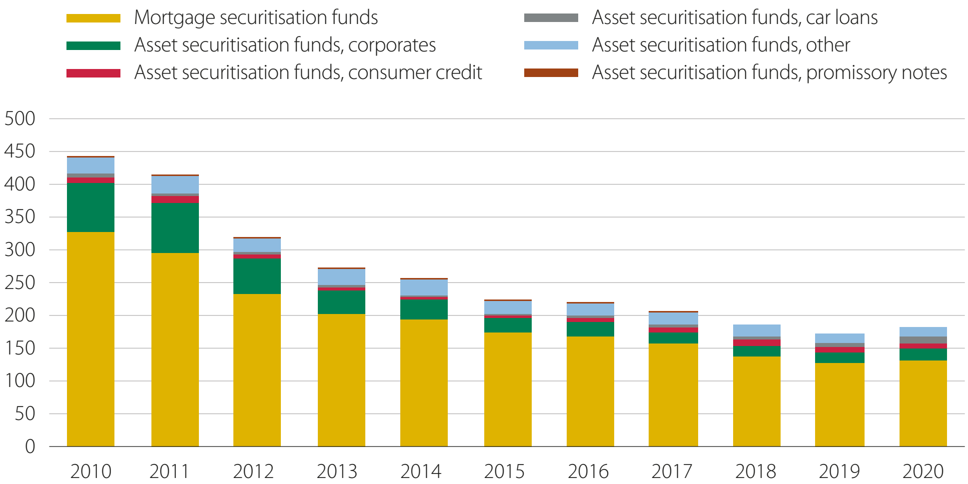
At the end of 2020, the outstanding balance reached €181.7 billion, of which almost 73% corresponded to mortgage securitisations.[50, 51]

49 According to data from the Bank of Spain, the outstanding balance of mortgage loans stood at €509.92 billion at the end of 2020, the lowest level of the last decade.

50 The average of this value for the period 2010 to 2020 was 74.5%.

51 Despite this decrease, securitisation funds represent the second most significant group of entities quantitatively within the group that makes up non-bank financial intermediation in Spain (the first group is made up of certain types of investment funds). For more information, see the reports published on the CNMV website: http://www.cnmv.es/portal/Publicaciones/PublicacionesGN.aspx?id=56

Outstanding nominal balance of securitisation funds by type of asset assigned (2010-2020) FIGURE 15



Source: CNMV. Data in billions of euros.

In addition, the outstanding balance of corporate loan securitisation fund issues has also fallen sharply, coinciding with the greater restrictions on corporate credit, especially SMEs, as well as companies' increased direct recourse to the markets through debt issuance. Thus in 2020 the outstanding balance of securitisations of company loans represented around €17 billion, less than 10% of the total and less than a fifth of the outstanding balance of ten years ago.

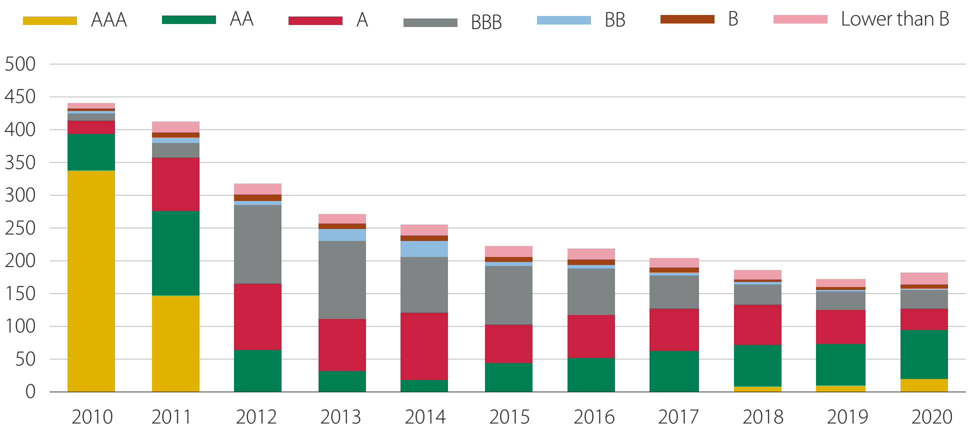
On the other hand, despite their reduced volume, the best relative performance has come from funds for consumer loans and car loans. Both have recovered strongly in recent years – after a sharp fall in the middle of the decade – due to investors' interest in this type of asset, as an important part of the new funds of this type are considered STS securitisations, as well as their higher yield in a context of lower delinquency, which is why they reach the highest outstanding balances of the last decade and represent around 5.5% and 4.5% of the total outstanding balance, respectively.

5.3.2 Evolution of the outstanding balance of securitisation issues based on their credit rating

The numerous problems with securitisations due to the role played by credit rating agencies in the years before the financial crisis led to a sharp adjustment of credit ratings of outstanding issues in many cases. As was foreseeable, Spanish securitisations did not escape this process and were subjected to significant cuts in their ratings, to which was added the effect of the sovereign debt crisis in 2012, which led to the downgrading of ratings of all assets, not just public debt. As a consequence, the outstanding balance of Spanish securitisations rated AA or higher, which in 2010 accounted for almost 90% of the total outstanding, underwent a sharp adjustment and came to account for barely 12% of the total in 2013, while those rated AAA disappeared entirely, a circumstance that remained in force until the final years of the decade (see Figure 16).

Outstanding nominal balances of securitisation funds by rating (2010-2020)

FIGURE 16



Source: AIAF, ESMA and authors. Annual data in billions of euros.

From that moment on, the issuing of securitisations was conditioned by their use as collateral in financing operations with the ECB, so the structures of the issues and the assets that formed them were largely conditioned by the ECB requirements in terms of the minimum rating that the issues intended for this purpose had to have. In addition, the market activity itself was limited to investment grade securitisations. For all these reasons, although the ECB initially established a minimum rating of AAA for use as collateral, it soon relaxed the requirements and in mid-2012 it set them at BBB. From that moment on, most of the outstanding balance of securitisations (between 60 and 75%) was in tranches rated between A and BBB, because the issuers formed the structures of new securitisations with assets that allowed them to reach this requirement in order to use them as collateral with the ECB. Subsequently, from 2016, the improvement in the financial situation allowed the outstanding balance of the BBB tranches to be progressively reduced in favour of the higher tranches and AAA-rated securitisations resurfaced.

On the other hand, the most subordinated tranches with the worst ratings – the equity tranches – remained for much of the period at levels close to 15% and in the last years of the decade there was even an increase in the highest risk tranches (rated B or lower) as a result of increased interest from some specific types of investors[52] in this type of asset in the absence of alternative profitable risk-free assets.

5.3.3 Evolution of securitisation issuing activity in the secondary market

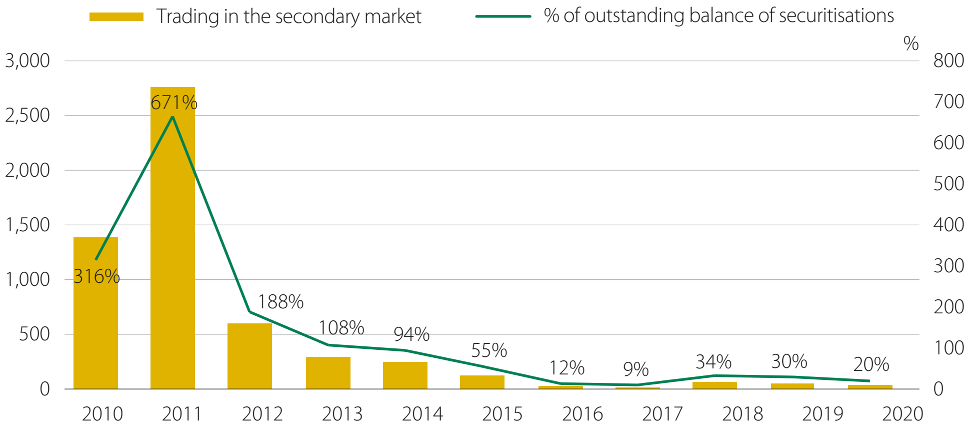
The activity of securitisation issuances in the secondary debt markets has gone through various stages: a first, of great activity after the outbreak of the financial crisis, which gave way to a period of gradual decline in the market, during which a large number of players withdrew and very low trading values were reached (the ECB came to play a key role as a promoter of the securitisation market); and a final stage, in the last years of the decade, in which the ECB has continued to maintain its

52 Such as investment funds specialising in high-yield debt.

hegemony, but in which there has been a slight increase in activity and investor interest in the secondary market (see Figure 17).

In any case, the trading figures achieved in recent years in the secondary market[53] (between 20 and 30% of the balance of securities in circulation) are very small compared to what could be considered standard market values and are distorted by the role played by the ECB, which, in turn, has included securitisations in its asset purchase programmes. The volumes traded remain, therefore, very far from a possible state of normalisation and from the activity records observed before the crisis.

Secondary market activity of securitisation funds (2010-2020) FIGURE 17



Source: CNMV. Annual data in billions of euros.

5.4 The activity of STS securitisation funds in Spain

Since their launch at the beginning of 2019, the activity of Spanish STS securitisation funds has been growing gradually in both the primary and secondary markets. A detailed analysis of the data allows us to extract some preliminary conclusions about their behaviour:

– Spanish STS issues[54] reached €27,869 million until the first half of 2021, of which €6,022 million and €18,837 million corresponded to the years 2019 and 2020 respectively. The amount of these issues represented 32% and 52%, respectively, of all issues registered with the CNMV,[55] reflecting their significant growth and the greater attractiveness of the specific characteristics of this instrument among issuers and investors.

53 The data available for the years 2016 and 2017 may contain errors and inaccuracies and, therefore, underestimate the trading volume in the market.

54 According to data on securitisation issues registered with the CNMV and which form part of the STS securitisation registry of the European Securities and Markets Authority (ESMA).

55 Preliminary data for the first half of 2021 show that the percentage of STS issues had fallen to 28% of the total securitisation issues registered with the CNMV.

– The number of STS funds registered since launch is 15, structured in different tranches, ranging from 2 to 8, although the most common securitisation is made up of 6 or 7 tranches that concentrate most of the amount issued in the most senior tranches. The size of the funds ranges between €480 million and €14 billion, but their average value is around €1 billion.

– By type of securitised asset, most of the funds – a total of 12 – correspond to consumer loans[56] or car loans, while the rest correspond to mortgages. However, in terms of nominal volume issued, 46% of securitisations have consumer loans and car loans as the underlying assets, while 56% have mortgage loans.

– In relation to the quality of the securitised assets, all the securitisations have a credit rating of A or higher (investment grade) in their most senior tranche, issued amount of which is the highest, although many of them have subordinated or equity tranches rated as speculative or even unrated. In aggregate terms, 89% of the volume issued has a minimum credit rating of BBB, which is the minimum amount required by the ECB for securities used as collateral in its financing operations.

– By type of investors, 19% of the total amount issued up to 2020 was acquired[57] at the time of its issue by qualified investors, while the remaining 81% remained on the balance sheet of the originators. Subsequently, with data available at the end of 2020, it can be seen that these latter entities have transferred part of the securities they held on their balance sheets, thereby increasing the percentage of securities found in the portfolios of institutional investors to 26%.[58] Of the remaining 74%, around 15% remains on the balance sheets of the issuing entities and the majority (59%) is in the hands of the ECB.

– The outstanding balance stood at €24,859 million at the end of 2020, 14% of the total outstanding issues. Trading figures in the secondary market, despite their short history, seem to remain in line with those of common securitisations, standing in 2019 and 2020 between 20 and 25%, respectively, of the outstanding securities. STS securitisations have also been distorted by the role played by the ECB in the market, so it is too early to conclude whether their intrinsic characteristics make them more liquid instruments than common securitisations as might appear at first sight.

6 Conclusions

This article reviews the main problems identified in securitisation as a result of the global financial crisis and the solutions adopted by regulators since then to alleviate

56 Including credit cards.

57 Including data on all issues of this type carried out up to the year 2020. Preliminary data for the first half of 2021 raise this percentage to 27%.

58 In the case of common securitisations, the percentage of securitisations in the hands of qualified investors is reduced to just over 23%, with most of the debt – around 69% – being kept on the balance sheets of the entities, since securitisations in the hands of the ECB only represent just over 8% of the total.

most of them. In the international sphere, the most prominent problems encountered had to do with the existence of conflicts of interest between issuers (originators) and investors, the lack of transparency of these products and, especially, their complexity. These factors gave rise to a major decline in the international securitisation market that spread to Spain, although in Spain the loss of investor interest was more related to the existing uncertainty regarding the solvency of the banking sector and the evolution of the real-estate market.

The reforms adopted as a result of the financial crisis in Europe have resulted in the development of a new stricter legal framework for securitisation activity, aimed at greater transparency, but its effects from the market point of view are still limited. In this sense, although the regulators have highlighted the need to recover securitisations as financing and risk transmission mechanisms, there is still a long way to go in this regard (as reflected both by the fall in volumes issued and traded, that still have not recovered and are similar to those of the early 2000s) to see the effectiveness of the new regulations. This effectiveness has been affected in recent years by the role played by the clearly expansionary monetary policy carried out by the ECB, characterised by abundant injections of liquidity both to the market and to agents.[59]

In the short term, it is most likely that securitisation activity, both in the primary and secondary markets, will continue to be conditioned by the ECB's monetary policy, which, at the moment, is trying to alleviate the serious effects that the outbreak of the coronavirus pandemic has caused for the European economy. In the medium term, revitalising this market requires greater proactivity on the part of financial institutions. These entities – the main issuers in the market – should allocate a greater number of securitisation tranches to the market in order to progressively rebuild both confidence and the investor base, even though this entails additional costs in terms of remuneration and distribution. In this sense, STS securitisations have the right characteristics to progressively contribute to the normalisation of this market as a mechanism to favour lending to companies and households and, therefore, facilitate economic activity.

Bibliographical references

Ashcraft, A., Goldsmith-Pinkham, P., and Vickery, J. (2010). *MBS Rating and the Mortgage Credit Boom.* European Banking Centre, Discussion Paper No. 2010-24S.

Bar-Isaac, J. and Shapiro, J. (2010). "Ratings quality over the business cycle". *Journal of Financial Economics,* No. 108, 1, pp. 62-78.

Bubb, R. and Kaufman, A, (2009). *Securitisation and moral hazard: evidence from a lender cutoff rule.* Boston Federal Reserve, Public Policy Discussion Paper No. 09-5. Available at: https://www.bostonfed.org/publications/public-policy-discussion-paper

59 The numerous injections of liquidity have been carried out both through the successive rounds of financing operations (LTROs and TLTROs) and through the various asset purchase programmes, which have included securitisations themselves within the range of eligible assets.

Carbó-Valverde, S., Marqués-Ibáñez, D. and Rodríguez Fernández, F. (2011). *Securitisation, bank lending and credit quality, the case of Spain*. European Central Bank, Working Paper No. 1329. Available at: https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1329.pdf

Elul, R. (2009). *Securitisation and Mortgage Default: Reputation vs. Adverse Selection*. Federal Reserve Bank of Philadelphia, Working Paper No. 09-21.

Greenbaum, S.I. and Thakor, J.V. (1987). "Banking funding modes: securitisation versus deposits". *Journal of Banking and Finance*, No. 11, pp. 379-401.

Hull, J.C. (2009). "The credit crunch of 2007: What went wrong? Why? What lessons can be learned?". *Journal of Credit Risk*, 5, 2, pp. 3-18.

Kara, A., Marques-Ibanez, D., and Ongena, S. (2010). *Securitisation and lending standards: evidence from the wholesale loan market*. European Central Bank, Working Paper No. 1362. Available at: https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1362.pdf

Krainer, J. and Laderman, E. (2009). *Mortgage Loan Securitisation and Relative Loan Performance*. Federal Reserve Bank of San Francisco, Working Paper No. 2009-22. Available at: https://www.frbsf.org/economic-research/publications/working-papers/2009/22/

Mathis, J., McAndrews, J., and Rochet, J.C. (2009). "Rating the raters: Are reputation concerns powerful enough to discipline rating agencies?". *Journal of Monetary Economics*, 56, 5, pp. 657-674.

Martín, M.R. (2014). *Análisis de los fondos de titulización españoles: características en el momento de su constitución y comportamiento durante los años de la crisis* ("Analysis of Spanish securitisation funds: characteristics at the time of their creation and performance during the crisis years") CNMV, Working Paper No. 57. Available at: DT_57.pdf (cnmv.es)

Martín, M.R. (2011). *La titulización en Europa durante la crisis* ("Securitisation in Europe during the crisis"). CNMV, Working Paper No. 49. Available at: DT49_web.pdf (cnmv.es)

Pavel, C. and Phillis, D. (1987). "Why commercial banks sell loans: An empirical analysis". Federal Reserve Bank of Chicago, *Economic Perspectives*, Vol. 11 (2), No. 3, pp. 3-14. Available at: https://www.chicagofed.org/publications/economic-perspectives/1987/07mayjun1987-part1-pavel

III Legislative Annex

Since the publication of the *CNMV Bulletin* for the third quarter of 2021, the following legislative developments have taken place:

Spanish legislation

– Royal Decree-Law 24/2021, of 2 November, transposing European Union directives on covered bonds, cross-border distribution of collective investment undertakings, open data and re-use of public sector information, exercise of copyright and related rights applicable to certain online transmissions and retransmissions of television and radio programmes, temporary exemptions on certain importations and supplies, consumer and promotion of clean and energy-efficient road transport vehicles.

  The Royal Decree-Law, the purpose of which is to transpose various EU directives of different kinds, is structured in seven books, made up of 91 articles, four additional provisions, four transitional provisions, one repealing provision, ten final provisions and one annex.

  The first book transposes Directive (EU) 2019/2162 of the European Parliament and of the Council, of 27 November 2019, on the issue of covered bonds and covered bond public supervision. Within the framework of the transposition of the directive, the Royal Decree-Law seeks to simplify the legal regime of the mortgage market, integrating most of the aspects provided in Law 2/1981, of 25 March 25, regulating the mortgage market.

  This first book consists of eight titles covering three broad regulatory areas, namely the establishment of common principles, the specificities of the various kinds of covered bond and public intervention throughout their life. Title I regulates the scope of application, the terminology used throughout the text and the types of covered bonds, a denomination that is reserved, as is the type of issuing entity, generally limited to credit institutions. Title II for its part constitutes the core of the transversal regulations applying to all types of covered bonds. It addresses the regulations applicable to their issue, seeking maximum simplicity and replacing many of the rules applicable to other issues by a greater degree of permanent public control. In this way, issuers are obliged to isolate a group of perfectly identified and controlled assets – the cover pool – as assets whose purpose will be to serve as a full guarantee of the entity's obligations to bondholders throughout the life of the bonds, the guarantee remaining in force even in the event of liquidation or resolution of the issuing credit institution, as established in the first chapter. The importance of the cover pool justifies the detailed regulation in the second chapter of the eligible cover assets, as well as their recording, which must allow the issuing entity to have a clear and precise identification of the specific assets form it at any given time.

  The Royal Decree-Law also incorporates the possibility of automatically extending the maturity structure of the bond programme, when any of the circumstances provided for in the law occurs and this is expressly established in the issue.

One of the key issues to take into account is the valuation of the cover assets, which is addressed in the fourth chapter. In particular, each cover asset must be valued at the time of its inclusion in the cover pool, and the issuer must necessarily have valuation policies and procedures that comply with the established regulatory requirements. The valuation of physical collateral assets must be continuously updated as a means of ensuring the permanent maintenance of the value of the cover pool.

An essential piece in the legislation is the particularly intense supervision regime to which covered bond issues are subject, based on two axes. The first of these derives from the issuer's obligation to designate a cover pool monitor. The second axis on which public intervention pivots is the continuous supervision carried out by the Bank of Spain, as the authority directly entrusted by law with the supervision of covered bond programmes. Its activity ranges from authorising the aforementioned cover pool monitor to authorising each bond programme.

Title VII of the first book regulates the effects of the issuer's insolvency or resolution. In the case of insolvency, the cover pool is segregated from the entity's assets to form a separated pool of assets.

For its part, the second book of this Royal Decree-Law introduces the necessary measures for the transposition of Directive (EU) 2019/1160 of the European Parliament and of the Council, of 20 June 2019, amending Directives 2009/65/EC and 2011/61/EU with regard to cross-border distribution of collective investment undertakings.

Firstly, measures are introduced to coordinate the conditions of fund managers operating in the internal market, such that those wishing to market their financial products in other Member States must notify the competent authorities of the host Member State.

Secondly, measures are developed to facilitate the marketing of CIS to investors from other Member States, eliminating the requirement of local physical presence in the host Member State, since electronic or telephone means are usually used.

Thirdly, the conditions for the cessation of the marketing of CIS and AIFs in the host Member State are clarified. The aim is to balance the interests of managers and investors such that managers' flexibility in being able to stop marketing a fund does not entail a cost or a reduction in safeguards or protection for investors.

Fourthly, regulation of the pre-marketing of AIFs is introduced in order to harmonise conditions in all Member States. The definition of pre-marketing and the conditions under which it was permitted had varied considerably between those Member States in which it is permitted, whereas in other Member States there was no concept of pre-marketing at all.

Finally, the Tenth Final Provision establishes the entry into force of the Royal Decree-Law the day after its publication in the *BOE* (Official State Gazette), with the exception of certain specified regulations which will enter into force on 8 July 2022 and which include among others: the first book, the first three additional provisions and the first and fourth final provisions.

– Royal Decree-Law 27/2021, of 23 November, extending certain economic measures to support the recovery.

  The European Commission recently approved the sixth amendment to the State aid Temporary Framework, prolonging the validity of some of the support measures for companies. This has the dual objective of intensifying the process of economic recovery and ensuring operators' legal certainty by clarifying the regulatory framework, given that the validity of the measures was set to expire at the end of 2021. In this context, this Royal Decree-Law establishes a series of provisions whose validity will extend beyond December 2021, in order to provide a framework of legal certainty that grants economic stability and supports companies in this phase of the recovery. This will be achieved by extending the term for liquidity and solvency aid, excluding 2020 and 2021 losses as grounds for business dissolution, and extending the moratorium on the obligation to declare insolvency in the case of equity imbalances until such time as the new insolvency regime is approved, as well as establishing a clear framework during 2022 for FDI.

  The Fourth Article of this Royal Decree-Law amends the Sole Transitional Provision of Royal Decree-Law 34/2020 of 17 November, such that the suspension of deregulation of certain FDI regulated in Sections 2 and 5 of Article 7 *bis* of Law 19/2003 of 4 July now also applies, until 31 December 2022, to FDI by residents of other EU or EFTA states in companies listed in Spain, or in non-listed companies if the value of the investment exceeds €500 million. For these purposes, listed companies in Spain will be deemed to be those whose shares are, in whole or in part, admitted to trading on an official Spanish secondary market and that have their registered office in Spain.

– Royal Decree 1041/2021, of 23 November, amending Royal Decree 2606/1996, of 20 December, on deposit guarantee funds of credit institutions; and Royal Decree 1012/2015, of 6 November, developing Law 11/2015 of 18 June on the recovery and resolution of credit institutions and investment firms and amending Royal Decree 2606/1996, of 20 December, on deposit guarantee funds of credit institutions.

  This Royal Decree completes the transposition of Directive (EU) of the European Parliament and of the Council, of 20 May 2019, to Spanish law, to which end the second Article amends Royal Decree 1012/2015 of 6 November developing Law 11/2015 of 18 June on the recovery and resolution of credit institutions and investment firms and amending Royal Decree 2606/1996 of 20 December on deposit guarantee funds of credit institutions. Specifically it amends certain provisions relating to the assets of the Deposit Guarantee Fund, the definition and scope of guaranteed deposits, the information to be provided by credit institutions and stress tests.

– Royal Decree-Law 29/2021, of 21 December, adopting urgent measures in the area of energy to promote electric mobility, self-consumption and the deployment of energy from renewable sources.

The purpose of this Royal Decree-Law is to facilitate the application and deployment of the lines of action included in the "Strategic Project for the Recovery and Transformation of the Economy (PERTE)" for "Renewable Energies, Renewable Hydrogen and Storage (ERHA)" approved by the Council of Ministers on 14 December 2021.

The Sixth Final Provision of this Royal Decree-Law makes significant amendments to Royal Decree-Law 24/2021, of 2 November, transposing EU directives on, inter alia, covered bonds. In the first place, one of the requirements laid down by Article 34 of the first book of Royal Decree-Law 24/2021 is clarified. This is the requirement for the covered bond issue prospectus or the basic prospectus of the corresponding programme to be submitted, which now applies only if the issue is subject to these requirements in accordance with EU regulations on prospectuses. Secondly, the First and Second Transitional Provisions are amended to clarify that instruments issued before the publication of the Royal Decree-Law will be governed by Law 2/1981 and its implementing regulations. In any case, these issues and those made between the publication of the Royal Decree-Law and 8 July 2022 must conform fully to the first book of said Royal Decree-Law by 8 July 2022. Lastly, the entry into force of the first book of the Royal Decree-Law and other complementary provisions is coordinated with the Repealing Provision, avoiding legal vacuums at all times.

Comisión Nacional del Mercado de Valores

– CNMV Circular 2/2021, of 28 September, on statistical reporting requirements for EU money market funds.

– CNMV Circular 3/2021, of 28 September, amending Circular 4/2013 of 12 June establishing the templates for the annual reports on remuneration of directors of listed public limited companies and those on the board of directors and control committees of savings banks that issue securities admitted to trading on official securities markets and Circular 5/2013 of 12 June establishing the templates for the annual corporate governance reports of listed public limited companies and savings banks that issue securities admitted to trading on official securities markets.

– Agreement of 27 October 2021, of the Board of the CNMV on the delegation of powers.

– CNMV Resolution of 15 December 2021, on the extension of the Agreement with the Fundación Instituto Iberoamericano de Mercados de Valores for the financing of the foundation's activities and attainment of its objectives.

– CNMV Resolution of 22 December 2021 commissioning the National Currency and Stamp Factory-Royal Mint, for the provision of technical and security services applicable to certification and electronic signature and in the field of electronic administration.

Other

– Resolution of 29 November 2021, of the Presidency of the FROB, the executive resolution authority for banks, on the extension and amendment of the Collaboration Agreement with the Bank of Spain, in matters of recovery and resolution of credit institutions.

– Bank of Spain Circular 5/2021, of 22 September, amending Circular 2/2016 of 2 February to credit institutions, on supervision and solvency, which completes the adaptation of the Spanish legal system to Directive 2013/36/EU and Regulation (EU) No. 575/2013.

  The Circular consists of a single rule, a final provision and an annex. The single rule brings into Circular 2/2016 the new macroprudential framework, according to the provisions of the Second Article of Royal Decree-Law 22/2018, which incorporated a series of amendments to Law 10/2014 of 26 June on the organization, supervision and solvency of credit institutions, to include the new macroprudential tools in the legal system of this subsector of financial institutions.

– Bank of Spain Circular 6/2021, of 22 December, amending Circular 4/2017 of 27 November, to credit institutions, on public and reserved financial reporting standards and models of financial statements, and Circular 4/2019 of 26 November, to financial credit establishments, on public and reserved financial reporting standards and models of financial statements.

  The purpose is to update Circulars 4/2017 and 4/2019, mainly with regard to the changes that have taken place in the IFRS adopted by the EU.

EU legislation (in order of publication in the *OJEU*)

– Commission Implementing Regulation (EU) 2021/1751, of 1 October 2021, laying down implementing technical standards for the application of Directive 2014/59/EU of the European Parliament and of the Council with regard to uniform formats and templates for notifications of determination of the impracticability of including contractual recognition of write down and conversion powers.

  Published in the *OJEU* (L) No. 349, of 4 October 2021, pp. 5-18.

- Commission Implementing Decision (EU) 2021/1753, of 1 October 2021, on the equivalence of the supervisory and regulatory requirements of certain third countries and territories for the purposes of the treatment of exposures in accordance with Regulation (EU) No. 575/2013 of the European Parliament and of the Council.

  Published in the *OJEU* (L) No. 349, of 4 October 2021, pp. 31-45.

- Commission Delegated Regulation (EU) 2021/1783, of 2 July 2021, supplementing Regulation (EU) No. 596/2014 of the European Parliament and of the Council with regard to regulatory technical standards containing a template document for cooperation arrangements with third countries.

  Published in the *OJEU* (L) No. 359, of 11 October 2021, pp. 1-5.

- Commission Delegated Regulation (EU) 2021/1833, of 14 July 2021, supplementing Directive 2014/65/EU of the European Parliament and of the Council by specifying the criteria for establishing when an activity is to be considered to be ancillary to the main business at group level.

  Published in the *OJEU* (L) No. 372, of 20 October 2021, pp. 1-10.

- Commission Implementing Regulation (EU) 2021/1847, of 14 October 2021, on the designation of a statutory replacement for certain settings of CHF LIBOR.

  Published in the *OJEU* (L) No. 374, of 22 October 2021, pp. 1-5.

- Commission Implementing Regulation (EU) 2021/1848, of 21 October 2021, on the designation of a replacement for the benchmark Euro overnight index average.

  Published in the *OJEU* (L) No. 374, of 22 October 2021, pp. 6-9.

- Commission Implementing Regulation (EU) 2021/2005, of 16 November 2021, laying down implementing technical standards amending Implementing Regulation (EU) 2016/1799 as regards the mapping tables specifying the correspondence between the credit risk assessments of external credit assessment institutions and the credit quality steps set out in Regulation (EU) No. 575/2013 of the European Parliament and of the Council.

  Published in the *OJEU* (L) No. 407, of 17 November 2021, pp. 10-17.

- Commission Implementing Regulation (EU) 2021/2006, of 16 November 2021, laying down implementing technical standards amending Implementing Regulation (EU) 2016/1800 as regards the allocation of credit assessments of external credit assessment institutions to an objective scale of credit quality steps in accordance with Directive 2009/138/EC of the European Parliament and of the Council.

  Published in the *OJEU* (L) No. 407, of 17 November 2021, pp. 18-26.

– Regulation (EU) 2021/2259 of the European Parliament and of the Council, of 15 December 2021, amending Regulation (EU) No. 1286/2014 as regards the extension of the transitional arrangement for management companies, investment companies and persons advising on, or selling, units of undertakings for collective investment in transferable securities (UCITS) and non-UCITS.

  Published in the *OJEU* (L) No. 455, of 20 December 2021, pp. 1-3.

– Regulation (EU) 2021/2260 of the European Parliament and of the Council, of 15 December 2021, amending Regulation (EU) 2015/848 on insolvency proceedings to replace its Annexes A and B.

  Published in the *OJEU* (L) No. 455, of 20 December 2021, pp. 4-14.

– Directive (EU) 2021/2261 of the European Parliament and of the Council, of 15 December 2021, amending Directive 2009/65/EC as regards the use of key information documents by management companies of undertakings for collective investment in transferable securities (UCITS).

  Published in the *OJEU* (L) No. 455, of 20 December 2021, pp. 15-17.

– Commission Delegated Regulation (EU) 2021/2268, of 6 September 2021, amending the regulatory technical standards laid down in Commission Delegated Regulation (EU) 2017/653 as regards the underpinning methodology and presentation of performance scenarios, the presentation of costs and the methodology for the calculation of summary cost indicators, the presentation and content of information on past performance and the presentation of costs by packaged retail and insurance-based investment products (PRIIPs) offering a range of options for investment and alignment of the transitional arrangement for PRIIP manufacturers offering units of funds referred to in Article 32 of Regulation (EU) No. 1286/2014 of the European Parliament and of the Council as underlying investment options with the prolonged transitional arrangement laid down in that Article.

  Published in the *OJEU* (L) No. 455, of 20 December 2021, pp. 1-55.

IV Statistics Annex

1 Markets

1.1 Equity

Share issues and public offerings[1]

TABLE 1.1

	2019	2020	2021	2020 IV	2021 I	II	III	IV
NO. OF ISSUERS								
Total	33	28	34	14	10	10	16	8
Capital increases	33	28	33	14	10	10	15	8
Primary offerings	1	1	1	1	0	1	0	0
Bonus issues	10	12	14	6	6	3	6	5
Of which, scrip dividend	9	12	13	6	6	3	6	4
Capital increases by conversion	3	2	4	0	0	1	3	0
For non-monetary consideration	2	1	4	1	1	1	2	0
With pre-emptive subscription rights	8	5	4	3	0	2	1	1
Without trading warrants	13	9	12	4	3	4	5	2
Secondary offerings	0	0	1	0	0	0	1	0
NO. OF ISSUES								
Total	52	40	52	16	10	14	19	9
Capital increases	52	40	51	16	10	14	18	9
Primary offering	1	1	1	1	0	1	0	0
Bonus issues	15	17	20	6	6	3	6	5
Of which, scrip dividend	14	17	19	6	6	3	6	4
Capital increases by conversion	4	2	4	0	0	1	3	0
For non-monetary consideration	2	2	5	1	1	1	3	0
With pre-emptive subscription rights	9	5	4	3	0	2	1	1
Without trading warrants	21	13	17	5	3	6	5	3
Secondary offerings	0	0	1	0	0	0	1	0
CASH VALUE (millions of euros)								
Total	9,806.0	10,852.1	17,138.3	3,560.3	2,969.2	8,948.7	4,898.8	321.7
Capital increases	9,806.0	10,852.1	14,938.1	3,560.3	2,969.2	8,948.7	2,698.6	321.7
Primary offerings	10.0	150.1	100.0	150.1	0.0	100.0	0.0	0.0
Bonus issues	1,565.4	1,949.0	1,264.9	375.2	772.5	195.8	131.1	165.5
Of which, scrip dividend	1,564.1	1,949.0	1,243.6	375.2	772.5	195.8	131.1	144.2
Capital increases by conversion	354.9	162.4	109.5	0.0	0.0	68.0	41.4	0.0
For non-monetary consideration[2]	2,034.2	233.0	3,525.3	220.5	2,079.2	56.0	1,390.1	0.0
With pre-emptive subscription rights	4,729.8	6,837.2	7,060.4	2,787.7	0.0	7,032.8	6.3	21.2
Without trading warrants	1,111.8	1,520.3	2,878.1	26.8	117.5	1,496.0	1,129.6	135.0
Secondary offerings	0.0	0.0	2,200.2	0.0	0.0	0.0	2,200.2	0.0
NOMINAL VALUE (millions of euros)								
Total	1,336.9	1,282.0	5,021.7	799.2	2,396.6	445.0	1,991.7	188.5
Capital increases	1,336.9	1,282.0	4,939.4	799.2	2,396.6	445.0	1,909.4	188.5
Primary offerings	0.5	7.8	5.4	7.8	0.0	5.4	0.0	0.0
Bonus issues	307.6	799.6	796.2	375.2	303.9	195.8	131.1	165.3
Of which, scrip dividend	306.3	799.6	774.9	375.2	303.9	195.8	131.1	144.0
Capital increases by conversion	16.6	1.7	46.3	0.0	0.0	23.0	23.3	0.0
For non-monetary consideration	401.0	68.0	3,289.0	66.8	2,079.2	56.0	1,153.8	0.0
With pre-emptive subscription rights	372.1	370.9	98.8	344.5	0.0	72.5	5.1	21.2
Without trading warrants	239.1	34.1	703.7	4.8	13.4	92.3	596.1	1.9
Secondary offerings	0.0	0.0	82.3	0.0	0.0	0.0	82.3	0.0
***Pro memoria*: transactions BME Growth[3]**								
No. of issuers	12	9	44	3	9	11	26	14
No. of issues	17	14	77	3	11	15	32	19
Cash value (millions of euros)	298.3	238.5	2,440.8	174.3	83.2	692.3	1,230.6	434.7
Capital increases	298.3	238.5	2,440.8	174.3	83.2	692.3	1,230.6	434.7
Of which, primary offerings	229.4	173.5	1,654.2	173.4	0.0	405.5	869.6	379.1
Secondary offerings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1 Registered transactions at the CNMV. Does not include data from BME Growth, ETF or Latibex.
2 Capital increases for non-monetary consideration are valued at market prices.
3 Unregistered transactions at the CNMV. Source: BME and CNMV.

Companies listed[1]

TABLE 1.2

	2019	2020	2021	2020 IV	2021 I	II	III	IV
Total electronic market[2]	129	126	124	127	127	129	126	124
Of which, foreign companies	7	7	7	7	7	7	7	7
Second market	3	0	0	0	0	0	0	0
Madrid	1	0	0	0	0	0	0	0
Barcelona	2	0	0	0	0	0	0	0
Bilbao	0	0	0	0	0	0	0	0
Valencia	0	0	0	0	0	0	0	0
Open outcry	9	11	10	11	10	10	10	10
Madrid	3	3	3	3	3	3	3	3
Barcelona	5	6	6	6	6	6	6	6
Bilbao	2	2	2	2	2	2	2	2
Valencia	2	2	1	2	1	1	1	1
BME MTF Equity[3]	2,709	2,580	2,432	2,580	2,530	2,484	2,458	2,432
Latibex	19	19	19	19	19	19	18	19

1 Data at the end of period.
2 Without ETFs (Exchange Traded Funds).
3 Alternative Stock Market.

Capitalisation[1]

TABLE 1.3

Millions of euros

	2019	2020	2021	2020 IV	2021 I	II	III	IV
Total electronic market[2]	806,064.3	690,101.6	781,805.4	690,101.6	740,998.9	775,240.5	784,104.0	781,805.4
Of which, foreign companies[3]	141,671.0	113,478.9	147,214.3	113,478.9	127,137.4	140,652.7	146,598.2	147,214.3
Ibex 35	494,789.4	424,167.3	475,870.0	424,167.3	424,167.3	484,076.2	482,298.0	475,870.0
Second market	31.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Madrid	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Barcelona	29.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bilbao	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Valencia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Open outcry	1,154.2	1,053.6	1,319.3	1,053.6	1,072.1	1,283.7	1,299.5	1,319.3
Madrid	69.8	30.9	23.1	30.9	27.1	27.1	23.1	23.1
Barcelona	1,036.5	956.0	1,258.7	956.0	1,009.5	1,221.1	1,239.4	1,258.7
Bilbao	32.9	20.6	19.2	20.6	21.2	21.2	19.7	19.2
Valencia	80.4	76.0	45.3	76.0	45.3	45.3	45.3	45.3
BME MTF Equity[4, 5]	44,706.4	43,595.5	48,656.9	43,595.5	44,706.5	46,128.3	47,484.6	48,656.9
Latibex	199,022.2	177,210.3	184,664.1	177,210.3	184,754.0	229,997.7	184,664.1	184,664.1

1 Data at the end of period.
2 Without ETFs (Exchange Traded Funds).
3 Capitalisation of foreign companies includes their entire shares, whether they are deposited in Spain or not.
4 Calculated only with outstanding shares, not including treasury shares, because capital stock is not reported until the end of the year.
5 Alternative Stock Market.

Trading

TABLE 1.4

Millions of euros

	2019	2020	2021	2020 IV	2021 I	II	III	IV
Total electronic market[1]	462,378.8	422,786.4	371,032.0	104,900.9	92,325.6	92,862.5	78,833.1	107,010.8
Of which, foreign companies	3,477.8	4,273.8	4,343.6	941.4	1,056.9	1,061.9	1,106.5	1,118.3
Second market	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Madrid	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Barcelona	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bilbao	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Valencia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Open outcry	6.2	2.5	7.4	0.5	2.8	2.6	0.4	1.6
Madrid	0.8	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Barcelona	3.2	2.4	7.4	0.5	2.7	2.6	0.4	1.6
Bilbao	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Valencia	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BME MTF Equity[2]	4,014.4	3,929.0	3,536.5	1,322.6	971.2	815.2	639.8	1,110.4
Latibex	136.4	79.5	48.8	9.3	11.2	8.1	7.9	21.7

1 Without ETFs (Exchange Traded Funds).
2 Alternative Stock Market.

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

TABLE 1.5

Millions of euros

	2019	2020	2021	2020 IV	2021 I	II	III	IV
Regular trading	450,575.7	405,120.5	353,900.3	101,374.2	89,838.4	88,486.7	75,244.2	100,331.1
Orders	258,242.2	278,516.1	235,489.7	65,258.3	65,154.6	55,217.9	54,975.2	60,141.9
Put-throughs	38,888.0	42,666.5	40,006.0	11,613.4	10,629.0	10,135.9	8,809.5	10,431.7
Block trades	153,445.5	83,938.0	78,404.7	24,502.5	14,054.8	23,132.8	11,459.5	29,757.6
Off-hours	3,098.1	4,174.3	4,890.0	937.2	970.0	1,721.1	435.6	1,763.2
Authorised trades	1,706.3	2,001.4	1,213.3	568.8	261.8	379.5	200.9	371.1
Art. 36.1 SMA trades	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tender offers	2,509.5	5,250.9	5,306.1	0.0	0.0	0.0	2,092.0	3,214.0
Public offerings for sale	634.4	967.8	1,723.2	165.0	105.0	1,618.2	0.0	0.0
Declared trades	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Options	3,422.0	3,369.1	2,787.7	1,308.7	747.8	400.5	633.9	1,005.6
Hedge transactions	1,799.4	1,902.4	1,211.5	546.9	402.7	256.6	226.5	325.7

1 Without ETFs (Exchange Traded Funds).

1.2 Fixed income

Gross issues registered at the CNMV

TABLE 1.6

	2019	2020	2021	2020 IV	2021 I	II	III	IV
NO. OF ISSUERS								
Total	39	47	34	25	11	14	13	13
Mortgage-covered bonds	12	14	7	6	3	3	3	2
Territorial-covered bonds	2	3	3	0	0	2	0	1
Non-convertible bonds and debentures	13	11	11	8	3	3	5	6
Convertible bonds and debentures	0	0	0	0	0	0	0	0
Backed securities	13	15	12	6	3	4	4	1
Commercial paper	11	11	7	4	1	5	0	1
Of which, asset-backed	0	0	0	0	0	0	0	0
Of which, non-asset-backed	11	11	7	4	1	5	0	1
Other fixed-income issues	1	2	1	0	1	0	0	0
Preference shares	1	2	4	1	1	0	1	2
NO. OF ISSUES								
Total	298	244	156	67	46	49	43	18
Mortgage-covered bonds	29	26	16	6	3	4	7	2
Territorial-covered bonds	3	6	3	0	0	2	0	1
Non-convertible bonds and debentures	205	143	82	34	30	24	21	7
Convertible bonds and debentures	0	0	0	0	0	0	0	0
Backed securities	48	52	41	22	10	14	14	3
Commercial paper[1]	11	11	7	4	1	5	0	1
Of which, asset-backed	0	0	0	0	0	0	0	0
Of which, non-asset-backed	11	11	7	4	1	5	0	1
Other fixed-income issues	1	4	1	0	1	0	0	0
Preference shares	1	2	6	1	1	0	1	4
NOMINAL AMOUNT (millions of euros)								
Total	90,164.5	132,111.3	101,170.7	54,734.5	23,638.4	24,728.1	25,484.7	27,319.5
Mortgage-covered bonds	22,933.0	22,960.0	28,700.0	4,450.0	3,500.0	9,000.0	9,450.0	6,750.0
Territorial-covered bonds	1,300.0	9,150.0	5,500.0	0.0	0.0	3,500.0	0.0	2,000.0
Non-convertible bonds and debentures	29,605.6	33,412.5	25,256.7	25,955.9	9,669.3	1,505.7	807.4	13,274.4
Convertible bonds and debentures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Backed securities	18,740.9	36,281.0	18,375.7	19,962.6	5,030.0	5,673.5	7,184.2	488.0
Commercial paper[2]	15,085.0	22,291.6	20,180.0	3,616.0	4,240.8	5,048.9	7,293.2	3,597.1
Of which, asset-backed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Of which, non-asset-backed	15,085.0	22,291.6	20,180.0	3,616.0	4,240.8	5,048.9	7,293.2	3,597.1
Other fixed-income issues	1,500.0	6,266.2	823.3	0.0	823.3	0.0	0.0	0.0
Preference shares	1,000.0	1,750.0	2,335.0	750.0	375.0	0.0	750.0	1,210.0
***Pro memoria*:**								
Subordinated issues	3,213.5	14,312.1	4,599.5	10,915.2	1,022.2	1,208.0	1,805.9	563.4
Underwritten issues	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1 Shelf registrations.
2 The figures for commercial paper refer to the amount placed.

Issues admitted to trading on AIAF[1]

TABLE 1.7

Nominal amount in millions of euros

	2019	2020	2021	2020 IV	2021 I	II	III	IV
Total	114,034.0	119,230.2	113,205.9	33,443.9	45,044.1	21,415.6	26,630.3	20,115.9
Commercial paper	15,036.1	22,293.8	20,190.1	4,951.4	2,902.1	6,335.2	4,763.2	6,189.7
Bonds and debentures	45,082.0	20,407.1	37,664.0	2,904.7	33,306.0	906.9	1,316.1	2,135.0
Mortgage-covered bonds	29,375.0	23,058.3	29,020.0	4,350.0	3,600.0	5,000.0	12,670.0	7,750.0
Territorial-covered bonds	3,300.0	9,150.0	5,500.0	0.0	0.0	3,500.0	0.0	2,000.0
Backed securities	18,740.9	36,281.0	18,375.7	20,487.8	4,030.0	5,673.5	7,131.0	1,541.2
Preference shares	1,000.0	1,750.0	1,625.0	750.0	375.0	0.0	750.0	500.0
Matador bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other fixed-income issues	1,500.0	6,290.1	831.0	0.0	831.0	0.0	0.0	0.0

1 Only corporate bonds are included.

AIAF. Issuers, issues and outstanding balance

TABLE 1.8

	2019	2020	2021	2020	2021			
				IV	I	II	III	IV
NO. OF ISSUERS								
Total	331	321	292	321	316	310	301	292
Corporate bonds	299	289	257	289	282	276	266	257
Commercial paper	9	8	40	8	7	8	7	40
Bonds and debentures	40	41	39	41	41	39	40	39
Mortgage-covered bonds	35	29	27	29	29	29	29	27
Territorial-covered bonds	7	8	6	8	8	7	7	6
Backed securities	227	222	198	222	216	212	202	198
Preference shares	6	5	5	5	4	4	4	5
Matador bonds	5	5	3	5	5	5	4	3
Government bonds	32	32	35	32	34	34	35	35
Letras del Tesoro	1	1	1	1	1	1	1	1
Long government bonds	1	1	1	1	1	1	1	1
Regional government debt	13	13	13	13	13	13	13	13
Foreign public debt	10	10	13	10	12	12	13	13
Other public debt	8	8	8	8	8	8	8	8
NO. OF ISSUES								
Total	2,775	2,610	2,451	2,610	2,574	2,560	2,492	2,451
Corporate bonds	1,834	1,655	1,465	1,655	1,600	1,579	1,508	1,465
Commercial paper	84	53	54	53	26	52	36	54
Bonds and debentures	718	589	481	589	573	547	519	481
Mortgage-covered bonds	209	200	183	200	200	191	195	183
Territorial-covered bonds	23	22	18	22	22	21	21	18
Backed securities	787	777	715	777	765	754	723	715
Preference shares	8	9	11	9	9	9	10	11
Matador bonds	5	5	3	5	5	5	4	3
Government bonds	941	955	986	955	974	981	984	986
Letras del Tesoro	12	12	12	12	12	12	12	12
Long government bonds	236	231	233	231	232	230	227	233
Regional government debt	173	167	171	167	164	166	170	171
Foreign public debt	508	533	558	533	554	562	564	558
Other public debt	12	12	12	12	12	11	11	12
OUTSTANDING BALANCE[1] (millions of euros)								
Total	6,421,003.0	6,297,532.5	6,261,335.6	6,297,532.5	6,439,031.5	6,429,153.0	6,358,591.6	6,261,335.6
Corporate bonds	463,816.1	464,170.7	499,600.4	464,170.7	479,648.0	470,461.5	472,718.8	499,600.4
Commercial paper	6,423.1	4,812.4	5,688.6	4,812.4	3,245.0	4,441.2	3,915.7	5,688.6
Bonds and debentures	62,477.8	53,696.1	68,584.8	53,696.1	78,185.6	78,173.8	78,850.0	68,584.8
Mortgage-covered bonds	195,719.1	199,054.1	199,681.7	199,054.1	197,648.2	190,799.1	201,689.8	199,681.7
Territorial-covered bonds	20,762.3	18,262.3	17,544.0	18,262.3	18,262.3	19,144.0	19,144.0	17,544.0
Backed securities	172,878.9	181,341.0	199,681.7	181,341.0	175,017.1	170,613.5	161,139.6	199,681.7
Preference shares	5,240.0	6,690.0	8,225.0	6,690.0	6,975.0	6,975.0	7,725.0	8,225.0
Matador bonds	314.8	314.8	194.6	314.8	314.8	314.8	254.7	194.6
Government bonds	5,957,186.8	5,833,361.8	5,804,721.7	5,833,361.8	5,959,383.5	5,958,691.5	5,885,872.8	5,804,721.7
Letras del Tesoro	68,335.5	79,765.7	79,409.6	79,765.7	82,265.0	77,822.1	76,253.7	79,409.6
Long government bonds	937,290.9	1,026,625.5	1,094,574.1	1,026,625.5	1,059,837.2	1,085,130.1	1,096,361.5	1,094,574.1
Regional government debt	35,247.6	32,775.5	36,131.2	32,775.5	33,894.9	34,155.4	35,127.5	36,131.2
Foreign public debt	4,914,792.7	4,692,674.9	4,592,786.5	4,692,674.9	4,781,866.2	4,760,263.7	4,676,809.9	4,592,786.5
Other public debt	1,520.2	1,520.2	1,820.2	1,520.2	1,520.2	1,320.2	1,320.2	1,820.2

1 Nominal amount.

AIAF. Trading

TABLE 1.9

Nominal amount in millions of euros

	2019	2020	2021	2020 IV	2021 I	II	III	IV
BY TYPE OF ASSET								
Total	158,807.2	140,509.4	47,659.3	15,868.7	21,502.7	17,534.7	5,855.1	2,766.8
Corporate bonds	275.2	170.2	174.3	44.5	38.9	49.1	35.5	50.7
Commercial paper	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bonds and debentures	260.0	169.4	174.3	44.3	38.9	49.1	35.5	50.7
Mortgage-covered bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Territorial-covered bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Backed securities	13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Preference shares	1.4	0.8	0.0	0.2	0.0	0.0	0.0	0.0
Matador bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Government bonds	158,532.0	140,339.2	47,485.0	15,824.2	21,463.8	17,485.6	5,819.6	2,716.1
Letras del Tesoro	25,858.4	27,975.5	5,186.3	4,276.9	2,076.0	1,755.0	1,305.0	50.3
Long government bonds	92,592.8	83,478.8	21,997.4	8,283.1	11,484.2	7,996.0	1,491.1	1,026.1
Regional government debt	35.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Foreign public debt	40,027.8	28,884.9	20,301.3	3,264.3	7,903.5	7,734.6	3,023.5	1,639.7
Other public debt	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BY TYPE OF TRANSACTION								
Total	158,807.2	140,509.4	47,659.3	15,868.7	21,502.7	17,534.7	5,855.1	2,766.8
Outright	158,807.2	140,509.4	47,659.3	15,868.7	21,502.7	17,534.7	5,855.1	2,766.8
Repos	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sell-buybacks/Buy-sellbacks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

AIAF. Third-party trading. By purchaser sector

TABLE 1.10

Nominal amount in millions of euros

	2019	2020	2021	2020 IV	2021 I	II	III	IV
Total	158,792.5	140,495.9	47,564.1	15,867.2	21,492.7	17,484.3	5,829.9	2,757.2
Non-financial companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial institutions	158,792.5	140,495.9	47,564.1	15,867.2	21,492.7	17,484.3	5,829.9	2,757.2
Credit institutions	385.5	176.6	278.3	60.7	34.7	43.3	162.8	37.5
CIS, insurance and pension funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other financial institutions	158,407.0	140,319.3	47,285.8	15,806.5	21,458.0	17,441.1	5,667.0	2,719.7
General government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Households and NPISHs[1]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest of the world	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1 Non-Profit Institutions Serving Households.

Equity markets. Issuers, issues and outstanding balances

TABLE 1.11

				2020	2021			
	2019	**2020**	**2021**	**IV**	**I**	**II**	**III**	**IV**
NO. OF ISSUERS								
Total	13	11	10	11	11	10	10	10
Private issuers	5	4	4	4	4	4	4	4
Non-financial companies	0	0	0	0	0	0	0	0
Financial institutions	5	4	4	4	4	4	4	4
General government[1]	8	7	6	7	7	6	6	6
Regional governments	2	2	2	2	2	2	2	2
NO. OF ISSUES								
Total	54	44	49	44	53	49	48	49
Private issuers	16	11	11	11	11	11	11	11
Non-financial companies	0	0	0	0	0	0	0	0
Financial institutions	16	11	11	11	11	11	11	11
General government[1]	38	33	38	33	42	38	37	38
Regional governments	20	18	26	18	27	26	26	26
OUTSTANDING BALANCES[2] (millions of euros)								
Total	7,340.4	6,158.4	8,399.3	6,158.4	8,830.8	8,412.5	8,413.9	8,399.3
Private issuers	481.1	366.3	319.4	366.3	353.6	341.7	330.5	319.4
Non-financial companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial institutions	481.1	366.3	319.4	366.3	353.6	341.7	330.5	319.4
General government[1]	6,859.2	5,792.2	8,079.9	5,792.2	8,477.2	8,070.7	8,083.4	8,079.9
Regional governments	6,260.7	5,179.3	7,549.3	5,179.3	7,862.8	7,549.3	7,549.3	7,549.3

1 Without public book-entry debt.
2 Nominal amount.

SENAF. Public debt trading by type

TABLE 1.12

Nominal amounts in millions of euros

				2020	2021			
	2019	**2020**	**2021**	**IV**	**I**	**II**	**III**	**IV**
Total	150,634.0	120,706.0	174,959.0	37,404.0	45,061.0	44,715.0	48,400.0	36,783.0
Outright	150,634.0	120,706.0	174,959.0	37,404.0	45,061.0	44,715.0	48,400.0	36,783.0
Sell-buybacks/Buy-sellbacks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1.3 Derivatives and other products

1.3.1 Financial derivative markets: MEFF

Trading on MEFF TABLE 1.13

Number of contracts

	2019	2020	2021	2020 IV	2021 I	II	III	IV
Debt products	0	0	0	0	0	0	0	0
Debt futures[1]	0	0	0	0	0	0	0	0
Ibex 35 products[2, 3]	6,625,993	6,395,357	5,547,599	1,506,481	1,364,908	1,329,170	1,430,095	1,423,426
Ibex 35 plus futures	5,965,905	5,905,782	5,260,568	1,353,344	1,274,216	1,264,040	1,377,802	1,344,510
Ibex 35 mini futures	145,489	154,351	92,657	31,363	26,918	21,783	21,059	22,896
Ibex 35 micro futures	0	0	0	0	0	0	0	0
Ibex 35 dividend impact futures	144,831	91,571	45,450	48,302	15,289	11,150	3,793	15,218
Ibex 35 sector futures	6	0	0	0	0	0	0	0
Call mini options	177,369	104,132	69,667	36,792	29,481	17,834	12,332	10,020
Put mini options	192,393	139,521	79,257	36,680	19,003	14,364	15,109	30,781
Stock products[4]	32,841,027	30,313,892	25,434,719	8,705,936	7,155,442	6,423,846	6,083,100	5,772,331
Futures	15,298,027	10,968,411	11,346,047	2,998,200	3,153,650	3,318,301	3,410,227	1,463,869
Stock dividend futures	758,700	130,055	2,100	56,015	0	0	400	1,700
Stock plus dividend futures	0	7,752	20,800	3,876	3,956	3,956	8,729	4,159
Call options	7,405,619	8,564,019	6,131,488	2,073,062	1,989,957	1,444,525	1,066,620	1,630,386
Put options	9,378,681	10,643,655	7,934,284	3,574,783	2,007,879	1,657,064	1,597,124	2,672,217

1 Contract size: €100,000 .
2 The number of Ibex 35 mini futures (multiples of €1) and micro futures (multiples of €0.1) was standardised to the size of the Ibex 35 plus futures (multiples of €10).
3 Contract size: Ibex 35, €10.
4 Contract size: 100 stocks.

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

Issues registered at the CNMV TABLE 1.14

	2019	2020	2021	2020 IV	2021 I	II	III	IV
WARRANTS								
Premium amount (millions of euros)	1,837.7	1,167.7	2,142.7	494.4	585.3	550.2	496.7	510.4
On stocks	901.4	445.7	792.8	171.6	200.3	220.4	169.3	202.7
On indexes	809.3	674.0	1,258.6	299.8	343.7	309.6	315.8	289.5
Other underlyings[1]	127.1	48.1	91.3	22.9	41.3	20.2	11.6	18.2
Number of issues	5,496	3,081	4,581	1,008	1,264	1,301	1,006	1,010
Number of issuers	6	5	4	3	3	2	2	2
OPTION BUYING AND SELLING CONTRACTS								
Nominal amounts (millions of euros)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On stocks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On indexes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other underlyings[1]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Number of issues	0	0	0	0	0	0	0	0
Number of issuers	0	0	0	0	0	0	0	0

1 It includes the following underlying: baskets of stocks, exchange rates, interest rates and commodities.

Equity markets. Warrants and ETF trading

TABLE 1.15

				2020	2021			
	2019	2020	2021	IV	I	II	III	IV[1]
WARRANTS								
Trading (millions of euros)	291.6	319.7	289.2	80.0	74.9	71.4	66.5	76.3
On Spanish stocks	81.1	121.1	123.3	42.6	43.9	36.2	20.4	22.7
On foreign stocks	19.7	26.0	18.2	4.6	4.9	4.0	3.8	5.6
On indexes	186.6	161.7	143.4	29.1	24.2	30.5	41.4	47.3
Other underlyings[2]	3.7	10.9	4.3	3.6	1.9	0.7	0.9	0.8
Number of issues[3]	3,605.0	3,785.0	3,249.0	811	878	811	781	779
Number of issuers[3]	8	7	4	4	4	4	4	4
CERTIFICATES								
Trading (millions of euros)	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Number of issues[3]	2	1	1	1	1	0	0	0
Number of issuers[3]	1	1	1	1	1	0	0	0
ETFs								
Trading (millions of euros)	1,718.8	2,548.1	1,549.0	621.6	400.5	345.3	404.5	398.7
Number of funds	6	5	5	5	5	5	5	5
Assets[4] (millions of euros)	229.2	241.5	259.8	241.4	259.4	270.8	267.1	259.8

1 Data at the end of the quarter, except ETF assets, which data refer to 30 November.
2 It includes the following underlying: baskets of stocks, exchange rates, interest rates and commodities.
3 Issues or issuers which were traded in each period.
4 Only assets from national collective investment schemes are included because assets from foreign schemes are not available.

2 Investment services

Investment services. Spanish firms, branches and agents

TABLE 2.1

				2020	2021			
	2018	2019	2020	IV	I	II	III	IV
BROKER-DEALERS								
Spanish firms	39	39	38	38	36	34	33	33
Branches in Spain	25	19	14	14	14	13	13	13
Agents operating in Spain	2,027	1,944	1,407	1,407	1,367	1,344	1,336	1,359
Branches in EEA[1]	9	9	8	8	8	7	4	4
Firms providing services in EEA[1]	24	25	25	25	23	21	20	20
Passports to operate in EEA[1, 2]	172	205	205	205	175	170	153	161
BROKERS								
Spanish firms	52	56	57	57	60	58	59	58
Branches in Spain	21	23	24	24	24	22	22	21
Agents operating in Spain	414	361	353	353	331	339	375	729
Branches in EEA[1]	2	1	0	0	0	0	4	4
Firms providing services in EEA[1]	25	24	30	30	32	29	30	30
Passports to operate in EEA[1, 2]	150	144	205	205	213	196	198	200
PORTFOLIO MANAGEMENT COMPANIES								
Spanish firms	1	1	1	1	1	1	1	0
FINANCIAL ADVISORY FIRMS								
Spanish firms	158	140	140	140	139	142	141	140
Branches in Spain	21	22	23	23	21	21	21	21
Branches in EEA[1]	2	2	2	2	1	1	1	1
Firms providing services in EEA[1]	29	29	27	27	27	28	27	26
Passports to operate in EEA[1, 2]	51	51	47	47	49	55	54	49
CREDIT INSTITUTIONS[3]								
Spanish firms	114	112	110	110	110	110	110	109

1 EEA: European Economic Area.
2 Number of passports to provide services in the EEA. The same entity may provide investment services in one or more Member States.
3 Source: Banco de España [Bank of Spain] and CNMV.

Investment services. Foreign firms

TABLE 2.2

				2020	2021			
	2018	2019	2020	IV	I	II	III	IV
Total	3,474	3,567	3,617	3,617	1,333	1,345	1,364	1,369
Investment services firms	3,002	3,088	3,131	3,131	927	937	951	952
From EU Member states	2,999	3,085	3,128	3,128	922	932	946	947
Branches	61	65	66	66	41	41	42	41
Free provision of services	2,938	3,020	3,062	3,062	881	891	904	906
From non-EU States	3	3	3	3	5	5	5	5
Branches	0	0	0	0	2	2	2	2
Free provision of services	3	3	3	3	3	3	3	3
Credit institutions[1]	472	479	486	486	406	408	413	417
From EU Member states	466	473	480	480	401	403	408	412
Branches	53	54	50	50	51	50	52	52
Free provision of services	413	419	430	430	350	353	356	360
Subsidiaries of free provision of services institutions	0	0	0	0	0	0	0	0
From non-EU States	6	6	6	6	5	5	5	5
Branches	3	3	4	4	3	3	3	3
Free provision of services	3	3	2	2	2	2	2	2

1 Source: Banco de España [Bank of Spain] and CNMV.

Intermediation of spot transactions[1]

TABLE 2.3

Millions of euros

				2020		2021		
	2018	2019	2020	III	IV	I	II	III
FIXED INCOME								
Total	3,082,789.5	3,222,363.2	3,782,640.8	812,220.5	744,236.9	883,875.4	757,396.9	472,152.2
Broker-dealers	2,184,921.9	2,263,416.4	3,345,439.9	809,770.1	741,972.5	880,812.8	755,486.3	470,699.2
Spanish organised markets	855,948.9	909,992.9	1,261,885.8	335,918.7	414,745.3	415,199.3	338,861.7	250,039.0
Other Spanish markets	1,111,231.9	1,012,359.1	1,721,922.5	386,420.7	246,211.8	309,058.9	280,240.9	134,635.1
Foreign markets	217,741.1	341,064.4	361,631.6	87,430.7	81,015.4	156,554.6	136,383.7	86,025.1
Brokers	897,867.6	958,946.8	437,200.9	2,450.4	2,264.4	3,062.6	1,910.6	1,453.0
Spanish organised markets	6,237.8	17,314.9	1,229.4	63.8	157.1	313.0	217.0	160.0
Other Spanish markets	702,731.7	803,742.9	405,199.7	15.5	16.6	17.5	19.5	10.4
Foreign markets	188,898.1	137,889.0	30,771.8	2,371.1	2,090.7	2,732.1	1,674.1	1,282.6
EQUITY								
Total	630,896.1	1,213,388.9	1,816,691.4	399,610.5	423,633.8	587,035.0	438,252.0	135,727.2
Broker-dealers	600,442.4	1,194,473.3	1,793,180.4	395,365.0	417,973.8	581,477.9	432,767.3	131,370.6
Spanish organised markets	525,648.7	329,666.8	261,188.7	61,868.9	38,336.4	35,850.3	22,207.0	6,346.7
Other Spanish markets	839.1	1,771.0	5,938.7	1,358.8	1,791.1	3,232.7	1,774.8	1,055.1
Foreign markets	73,954.6	863,035.5	1,526,053.0	332,137.3	377,846.3	542,394.9	408,785.5	123,968.8
Brokers	30,453.7	18,915.6	23,511.0	4,245.5	5,660.0	5,557.1	5,484.7	4,356.6
Spanish organised markets	6,462.5	7,712.5	7,137.8	1,157.4	1,843.1	1,752.1	1,734.4	1,155.7
Other Spanish markets	1,328.5	1,006.8	1,094.9	204.5	261.6	298.9	498.5	404.4
Foreign markets	22,662.7	10,196.3	15,278.3	2,883.6	3,555.3	3,506.1	3,251.8	2,796.5

1 Period accumulated data. Quarterly.

Intermediation of derivative transactions[1, 2]

TABLE 2.4

Millions of euros

				2020		2021		
	2018	2019	2020	III	IV	I	II	III
Total	10,308,915.0	10,807,586.8	11,557,923.7	2,778,782.7	3,798,892.3	2,662,237.6	2,441,759.7	2,182,511.2
Broker-dealers	10,065,090.4	10,523,995.1	11,261,186.5	2,737,831.0	3,710,600.1	2,578,484.5	2,410,453.9	2,173,689.4
Spanish organised markets	5,457,270.1	5,058,147.9	3,839,450.0	1,028,024.7	1,028,274.7	1,008,973.3	1,147,718.4	1,081,941.0
Foreign organised markets	3,927,718.5	4,160,941.8	5,884,599.5	1,432,002.8	2,074,662.4	1,153,439.5	997,145.4	917,068.7
Non-organised markets	680,101.8	1,304,905.4	1,537,137.0	277,803.5	607,663.0	416,071.7	265,590.1	174,679.7
Brokers	243,824.6	283,591.7	296,737.2	40,951.7	88,292.2	83,753.1	31,305.8	8,821.8
Spanish organised markets	30,836.1	29,601.4	12,975.9	2,770.0	3,903.5	3,781.9	2,340.5	672.8
Foreign organised markets	105,915.8	116,038.0	195,686.4	37,982.9	81,723.0	79,914.9	27,800.9	7,987.5
Non-organised markets	107,072.7	137,952.3	88,074.9	198.8	2,665.7	56.3	1,164.4	161.5

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

2 Period accumulated data. Quarterly.

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

TABLE 2.5

	2018	2019	2020	2020 III	IV	2021 I	II	III
NUMBER OF PORTFOLIOS								
Total[2]	16,172	25,389	44,983	41,911	44,983	53,783	65,053	75,875
Broker-dealers. Total	3,807	3,219	3,585	3,491	3,585	4,265	8,968	13,246
CIS[3]	37	40	42	35	42	40	40	38
Other[4]	3,770	3,179	3,543	3,456	3,543	4,225	8,928	13,208
Brokers. Total	12,364	22,169	41,397	38,420	41,397	49,518	56,085	62,629
CIS[3]	83	79	82	81	82	69	66	65
Other[4]	12,281	22,090	41,315	38,339	41,315	49,449	56,019	62,564
Portfolio management companies.[2] Total	1	1	1	–	1	–	–	–
CIS[3]	1	1	1	–	1	–	–	–
Other[4]	0	0	0	–	0	–	–	–
ASSETS UNDER MANAGEMENT (thousands of euros)								
Total[2]	4,854,719	4,946,670	6,119,284	5,607,558	6,119,284	6,132,979	6,776,795	7,230,753
Broker-dealers. Total	2,216,956	2,266,997	2,687,786	2,527,115	2,687,786	2,146,038	2,393,001	2,551,997
CIS[3]	838,379	1,059,718	1,280,966	1,091,841	1,280,966	590,333	586,695	598,536
Other[4]	1,378,577	1,207,279	1,406,820	1,435,274	1,406,820	1,555,705	1,806,306	1,953,461
Brokers. Total	2,619,297	2,658,674	3,410,772	3,080,443	3,410,772	3,986,941	4,383,794	4,678,756
CIS[3]	1,295,580	1,346,615	1,256,276	1,024,130	1,256,276	1,063,010	1,081,072	1,096,336
Other[4]	1,323,717	1,312,059	2,154,496	2,056,313	2,154,496	2,923,931	3,302,722	3,582,420
Portfolio management companies.[2] Total	18,466	20,999	20,726	–	20,726	–	–	–
CIS[3]	18,466	20,999	20,726	–	20,726	–	–	–
Other[4]	0	0	0	–	0	–	–	–

1 Data at the end of period. Quarterly.
2 Only public information about portfolio management companies is shown with the aim of maintaining statistical secrecy, as the number of companies is not enough to guarantee this it. For the rest of the periods, only data on broker-dealers and brokers are shown.
3 It includes both resident and non-resident CIS management.
4 It includes the rest of clients, both covered and not covered by the Investment Guarantee Fund – an investor compensation scheme regulated by Royal Decree 948/2001.

Financial advice. Number of contracts[1, 2]

TABLE 2.6

	2018	2019	2020	2020 III	IV	2021 I	II	III
NUMBER OF CONTRACTS								
Total[3]	23,149	26,561	31,169	30,732	31,169	30,765	31,626	32,296
Broker-dealers. Total	5,241	6,163	8,721	8,553	8,721	9,126	9,349	9,537
Retail clients	5,211	6,115	8,670	8,500	8,670	9,074	9,297	9,481
Professional clients	21	31	45	47	45	46	46	50
Eligible counterparties	9	17	6	6	6	6	6	6
Brokers. Total	17,908	20,398	22,448	22,179	22,448	21,639	22,277	22,759
Retail clients	17,654	20,125	22,128	21,878	22,128	21,390	22,034	22,515
Professional clients	199	229	282	258	282	207	201	203
Eligible counterparties	55	44	38	43	38	42	42	41
Portfolio management companies.[3] Total	0	0	0	–	0	–	–	–
Retail clients	0	0	0	–	0	–	–	–
Professional clients	0	0	0	–	0	–	–	–
Eligible counterparties	0	0	0	–	0	–	–	–
***Pro memoria*: commission received for financial advice[4]** (thousands of euros)								
Total[3]	35,287	37,583	39,803	21,650	39,803	7,270	12,672	19,595
Broker-dealers	9,562	23,400	5,813	4,098	5,813	1,267	2,764	4,315
Brokers	25,725	14,183	33,990	17,552	33,990	6,003	9,908	15,280
Portfolio management companies[3]	0	0	0	–	0	–	–	–

1 Data at the end of period. Quarterly.
2 Quarterly data on assets advised are not available since the entry into force of CNMV Circular 3/2014, of 22 October.
3 Only public information about portfolio management companies is shown with the aim of maintaining statistical secrecy, as the number of companies is not enough to guarantee this. For the rest of the periods, only data on broker-dealers and brokers are shown.
4 Accumulated data from the beginning of the year to the last day of every quarter. It includes companies removed during the year.

Aggregated income statement. Broker-dealers

TABLE 2.7

Thousands of euros[1]

				2020	2021			
	2018	2019	2020	IV	I	II	III	IV[2]
I. Interest income	73,969	38,125	35,957	35,957	-856	9,586	23,451	35,780
II. Net commission	296,037	279,650	310,868	310,868	97,775	177,191	218,104	232,132
Commission revenues	414,595	427,813	525,812	525,812	158,537	320,279	406,485	429,327
Brokering	160,320	164,606	254,307	254,307	67,188	124,513	145,125	151,540
Placement and underwriting	11,090	8,849	5,279	5,279	26,843	70,129	83,778	84,207
Securities deposit and recording	42,958	42,643	39,260	39,260	9,107	18,384	27,534	30,086
Portfolio management	13,505	15,102	13,128	13,128	3,281	6,577	10,248	11,526
Design and advice	21,135	34,751	16,282	16,282	3,503	8,257	13,238	15,528
Stock search and placement	543	1,302	1,960	1,960	572	1,497	3,090	3,094
Market credit transactions	0	0	0	0	0	0	0	0
CIS marketing	55,483	53,506	50,985	50,985	14,902	30,969	46,730	53,473
Other	109,561	107,055	144,611	144,611	33,140	59,954	76,741	79,872
Commission expenses	118,558	148,163	214,944	214,944	60,762	143,088	188,381	197,195
III. Financial investment income	27,088	29,452	97,113	97,113	7,818	23,639	25,906	28,637
IV. Net exchange differences and other operating products and expenses	16,614	29,066	91,278	91,278	13,273	30,168	33,957	34,266
V. Gross income	413,708	376,293	535,216	535,216	118,010	240,585	301,418	330,816
VI. Operating income	85,837	55,978	124,993	124,993	28,472	67,511	65,910	79,510
VII. Earnings from continuous activities	91,771	54,528	102,928	102,928	35,277	67,780	69,599	83,154
VIII. Net earnings from the period	91,771	54,528	102,928	102,928	35,277	67,780	69,599	83,154

1 Accumulated data from the beginning of the year to the last day of every quarter. It includes companies removed during the year.
2 Available data: October 2021.

Results of proprietary trading. Broker-dealers

TABLE 2.8

Thousands of euros[1]

				2020		2021		
	2018	2019	2020	III	IV	I	II	III
TOTAL								
Total	114,751	101,039	221,894	169,792	221,894	20,128	61,827	81,777
Money market assets and public debt	11,193	2,625	23,229	20,480	23,229	72	3,870	3,271
Other fixed-income securities	11,842	27,811	18,457	7,299	18,457	6,338	11,010	14,438
Domestic portfolio	8,304	13,186	11,796	9,259	11,796	1,835	2,101	3,354
Foreign portfolio	3,538	14,625	6,661	-1,960	6,661	4,503	8,909	11,084
Equities	10,844	8,009	21,860	23,890	21,860	1,458	5,920	5,097
Domestic portfolio	9,901	7,006	22,859	24,124	22,859	767	3,847	4,359
Foreign portfolio	943	1,003	-999	-234	-999	691	2,073	738
Derivatives	-1,167	-3,873	28,367	20,882	28,367	3,713	-18,759	-20,864
Repurchase agreements	-107	-3,492	-6,851	-4,883	-6,851	-2,234	-4,281	-6,470
Market credit transactions	0	0	0	0	0	0	0	0
Deposits and other transactions with financial intermediaries	3,884	1,084	-6,207	-4,582	-6,207	606	202	2,139
Net exchange differences	283	118	-981	-563	-981	284	281	585
Other operating products and expenses	16,330	28,949	92,259	63,512	92,259	12,990	29,888	33,372
Other transactions	61,649	39,808	51,761	43,757	51,761	-3,099	33,696	50,209
INTEREST INCOME								
Total	73,968	38,127	35,957	24,501	35,957	-854	9,585	23,449
Money market assets and public debt	2,036	1,027	922	441	922	173	469	643
Other fixed-income securities	1,300	3,319	1,347	1,051	1,347	417	633	749
Domestic portfolio	124	734	556	479	556	70	152	179
Foreign portfolio	1,176	2,585	791	572	791	347	481	570
Equities	3,673	2,767	962	927	962	194	513	798
Domestic portfolio	2,892	2,456	766	709	766	121	263	470
Foreign portfolio	781	311	196	218	196	73	250	328
Repurchase agreements	-107	-3,492	-6,851	-4,883	-6,851	-2,234	-4,281	-6,470
Market credit transactions	0	0	0	0	0	0	0	0
Deposits and other transactions with financial intermediaries	3,884	1,084	-6,207	-4,582	-6,207	606	202	2,139
Other transactions	63,182	33,422	45,784	31,547	45,784	-10	12,049	25,590
FINANCIAL INVESTMENT INCOME								
Total	27,088	29,451	97,113	81,647	97,113	7,820	23,638	25,905
Money market assets and public debt	9,157	1,598	22,307	20,039	22,307	-101	3,401	2,628
Other fixed-income securities	10,542	24,492	17,110	6,248	17,110	5,921	10,377	13,689
Domestic portfolio	8,180	12,452	11,240	8,780	11,240	1,765	1,949	3,175
Foreign portfolio	2,362	12,040	5,870	-2,532	5,870	4,156	8,428	10,514
Equities	7,171	5,242	20,898	22,963	20,898	1,264	5,407	4,299
Domestic portfolio	7,009	4,550	22,093	23,415	22,093	646	3,584	3,889
Foreign portfolio	162	692	-1,195	-452	-1,195	618	1,823	410
Derivatives	-1,167	-3,873	28,367	20,882	28,367	3,713	-18,759	-20,864
Other transactions	1,385	1,992	8,431	11,515	8,431	-2,977	23,212	26,153
EXCHANGE DIFFERENCES AND OTHER ITEMS								
Total	13,695	33,461	88,824	63,644	88,824	13,162	28,604	32,423
Net exchange differences	283	118	-981	-563	-981	284	281	585
Other operating products and expenses	16,330	28,949	92,259	63,512	92,259	12,990	29,888	33,372
Other transactions	-2,918	4,394	-2,454	695	-2,454	-112	-1,565	-1,534

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

Aggregated income statement. Brokers

TABLE 2.9

Thousands of euros[1]

				2020	2021			
	2018	2019	2020	IV	I	II	III	IV[2]
I. Interest income	1,583	1,252	932	932	111	75	216	226
II. Net commission	135,782	130,293	143,162	143,162	40,147	76,041	114,528	125,875
Commission revenues	156,624	150,842	165,094	165,094	45,864	87,169	131,945	145,617
Brokering	20,018	23,194	22,035	22,035	4,708	8,087	10,824	11,734
Placement and underwriting	1,120	580	2,157	2,157	137	601	1,584	1,604
Securities deposit and recording	824	879	754	754	150	286	361	388
Portfolio management	15,412	14,890	14,554	14,554	4,572	9,371	14,648	16,400
Design and advice	26,446	14,426	34,128	34,128	6,072	10,079	15,480	17,086
Stock search and placement	0	0	0	0	0	418	562	563
Market credit transactions	0	0	0	0	0	0	0	0
CIS marketing	63,821	62,866	62,134	62,134	20,157	42,114	63,214	71,296
Other	28,983	34,008	29,331	29,331	10,067	16,216	25,273	26,546
Commission expenses	20,842	20,549	21,932	21,932	5,717	11,128	17,417	19,742
III. Financial investment income	-51	910	-5,562	-5,562	130	464	478	632
IV. Net exchange differences and other operating products and expenses	-279	1,194	-968	-968	-1,180	-1,872	-2,809	-3,066
V. Gross income	137,035	133,648	137,564	137,564	39,208	74,708	112,414	123,666
VI. Operating income	12,031	9,284	3,339	3,339	10,132	15,169	21,604	22,358
VII. Earnings from continuous activities	7,459	6,163	2,836	2,836	9,663	13,675	19,338	20,009
VIII. Net earnings of the period	7,459	6,163	2,836	2,836	9,663	13,675	19,338	20,009

1 Accumulated data from the beginning of the year to the last day of every quarter. It includes companies removed during the year.
2 Available data: October 2021.

Aggregated income statement. Portfolio management companies[1]

TABLE 2.10

Thousands of euros[2]

	2016	2017	2018	2019	2020
I. Interest income	83	23	6	5	1
II. Net commission	6,617	1,543	350	404	376
Commission revenues	6,617	1,543	350	404	376
Portfolio management	4,228	1,095	350	404	376
Design and advice	354	59	0	0	0
Other	2,035	390	0	0	0
Commission expenses	0	0	0	0	0
III. Financial investment income	-1	6	-25	13	-25
IV. Net exchange differences and other operating products and expenses	-126	-52	-20	-20	-20
V. Gross income	6,573	1,520	311	402	332
VI. Operating income	3,172	623	-2	52	-16
VII. Earnings from continuous activities	2,222	439	-2	37	-16
VIII. Net earnings of the period	2,222	439	-2	37	-16

1 Only public information about portfolio management companies is shown with the aim of maintaining statistical secrecy, as the number of companies is not enough to guarantee this.
2 Accumulated data from the beginning of the year. It includes companies removed during the year.

Capital adequacy and capital ratio[1]

TABLE 2.11

				2020		2021		
	2018	2019	2020	III	IV	I	II[2]	III[2]
TOTAL[3]								
Total capital ratio[4]	42.36	46.92	30.21	35.49	30.21	25.07	–	–
Own fund surplus (thousands of euros)	915,383	1,165,707	1,026,935	1,117,882	1,026,935	945,629	–	–
Surplus (%)[5]	429.49	486.52	277.59	343.63	277.59	213.41	–	–
No. of companies according to surplus percentage								
≤ 100%	20	23	26	23	26	29	–	–
> 100-≤ 300%	29	31	30	29	30	22	–	–
> 300-≤ 500%	10	10	12	11	12	11	–	–
> 500%	15	13	10	14	10	13	–	–
BROKER-DEALERS								
Total capital ratio[4]	45.16	49.63	30.81	36.83	30.81	25.10	–	–
Own fund surplus (thousands of euros)	874,235	1,118,273	960,720	1,052,796	960,720	876,847	–	–
Surplus (%)[5]	464.51	520.42	285.14	360.35	285.14	213.73	–	–
No. of companies according to surplus percentage								
≤ 100%	7	7	9	8	9	9	–	–
> 100-≤ 300%	10	14	11	13	11	11	–	–
> 300-≤ 500%	7	4	8	4	8	6	–	–
> 500%	14	11	8	12	8	8	–	–
BROKERS								
Total capital ratio[4]	21.17	23.34	24.06	23.71	24.06	24.76	–	–
Own fund surplus (thousands of euros)	40,952	47,249	66,051	65,086	66,051	68,782	–	–
Surplus (%)[5]	164.84	191.77	200.79	196.32	200.79	209.47	–	–
No. of companies according to surplus percentage								
≤ 100%	13	16	17	15	17	20	–	–
> 100-≤ 300%	18	16	18	16	18	11	–	–
> 300-≤ 500%	3	6	4	7	4	5	–	–
> 500%	1	2	2	2	2	5	–	–
PORTFOLIO MANAGEMENT COMPANIES[3]								
Total capital ratio[4]	29.68	25.72	22.15	–	22.15	–	–	–
Own fund surplus (thousands of euros)	196	185	164	–	164	–	–	–
Surplus (%)[5]	272.22	221.50	176.82	–	176.82	–	–	–
No. of companies according to surplus percentage								
≤ 100%	0	0	0	–	0	–	–	–
> 100-≤ 300%	1	1	1	–	1	–	–	–
> 300-≤ 500%	0	0	0	–	0	–	–	–
> 500%	0	0	0	–	0	–	–	–

1 This table only includes the entities subject to reporting requirements according to Regulation (EU) No. 575/2013 of the European Parliament and of the Council, of 26 June 2013, on prudential requirements for credit institutions and investment firms.
2 No available data from II-2021 onwards, due to regulatory changes made by Regulation (EU) 2019/2033 of the European Parliament and of the Council, of 27 November 2019, on the prudential requirements of investment firms; and Directive (EU) 2019/2034 of the European Parliament and of the Council, of 27 November 2019, on the prudential supervision of investment firms.
3 Only public information about portfolio management companies is shown with the aim of maintaining statistical secrecy, as the number of companies is not enough to guarantee this. For the rest of the periods, only data on broker-dealers and brokers are shown.
4 Total capital ratio is the own funds of the institution expressed as a percentage of the total risk exposure amount. This ratio should not be under 8%, pursuant to the provisions of Regulation.
5 Average surplus percentage is weighted by the required equity of each company. It is an indicator of the number of times, in percentage terms, that the surplus contains the required equity in an average company.

Return on equity (ROE) before taxes[1]

TABLE 2.12

	2018	2019	2020	2020 III	2020 IV	2021 I	2021 II	2021 III
TOTAL[2]								
Average (%)[3]	12.27	9.23	18.71	19.58	18.71	13.09	20.95	11.79
Number of companies according to annualised return								
Losses	40	32	33	42	33	31	30	33
0-≤ 15%	22	22	15	10	15	18	19	16
> 15-≤ 45%	10	19	20	18	20	12	13	15
> 45-≤ 75%	6	7	9	6	9	13	12	7
> 75%	14	12	15	17	15	17	17	20
BROKER-DEALERS								
Average (%)[3]	12.16	8.87	19.72	21.16	19.72	9.44	19.74	9.18
Number of companies according to annualised return								
Losses	18	13	12	20	12	15	10	14
0-≤ 15%	12	13	6	2	6	8	10	8
> 15-≤ 45%	5	7	9	9	9	6	8	7
> 45-≤ 75%	2	1	6	2	6	3	4	2
> 75%	2	2	2	4	2	2	1	1
BROKERS								
Average (%)[3]	13.24	12.05	12.48	9.37	12.48	35.76	28.08	23.92
Number of companies according to annualised return								
Losses	21	19	20	22	20	16	20	19
0-≤ 15%	10	9	9	8	9	10	9	8
> 15-≤ 45%	5	11	11	9	11	6	5	8
> 45-≤ 75%	4	6	3	4	3	10	8	5
> 75%	12	10	13	13	13	15	16	19
PORTFOLIO MANAGEMENT COMPANIES[2]								
Average (%)[3]	-0.84	19.74	-6.51	–	-6.51	–	–	–
Number of companies according to annualised return								
Losses	1	0	1	–	1	–	–	–
0-≤ 15%	0	0	0	–	0	–	–	–
> 15-≤ 45%	0	1	0	–	0	–	–	–
> 45-≤ 75%	0	0	0	–	0	–	–	–
> 75%	0	0	0	–	0	–	–	–

1 ROE has been calculated as:

$$ROE = \frac{Earnings\_before\_taxes\_(annualized)}{Own\_funds}$$

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

2 Only public information about portfolio management companies is shown, with the aim of maintaining statistical secrecy, as the number of companies is not enough to guarantee this. For the rest of the periods, only data on broker-dealers and brokers are shown.

3 Average weighted by equity, %.

Financial advisory firms. Main figures[1]

TABLE 2.13

Thousands of euros

	2016	2017	2018	2019	2020
ASSETS UNDER ADVICE[2]					
Total	30,174,877	30,790,535	31,658,460	21,627,677	12,049,182
Retail clients	7,588,143	9,096,071	10,281,573	8,313,608	6,797,540
Rest of clients and entities	22,586,734	21,694,464	21,376,887	13,314,069	5,251,642
Professional	5,654,358	6,482,283	7,052,031	–	–
Other	16,932,376	15,212,181	14,324,856	–	–
COMMISSION INCOME[3]					
Total	52,534	65,802	62,168	56,963	45,293
Commission revenues	51,687	65,191	61,079	56,029	44,656
Other income	847	611	1,088	934	637
EQUITY					
Total	24,119	32,803	33,572	32,089	30,607
Share capital	6,834	8,039	6,894	5,770	5,454
Reserves and retained earnings	12,123	13,317	15,386	17,260	19,111
Income for the year[3]	7,511	11,361	10,626	8,172	5,118
Other own funds	-2,349	86	666	888	923

1 Annual frequency since 2015 (CNMV Circular 3/2014, of 22 October).

2 Data at the end of each period. Since 2019, due to the entry into force of CNMV Circular 4/2018, there is no disaggregated information of non-retail clients.

3 Accumulated data from the beginning of the year.

3 Collective Investment Schemes (CIS)[a]

Number, management companies and depositories of CIS registered at the CNMV

TABLE 3.1

				2020	2021			
	2018	2019	2020	IV	I	II	III	IV[1]
Total financial CIS	4,386	4,233	4,018	4,018	3,970	3,901	3,859	3,826
Mutual funds	1,617	1,595	1,515	1,515	1,506	1,487	1,469	1,457
Investment companies	2,713	2,569	2,427	2,427	2,383	2,334	2,307	2,285
Funds of hedge funds	7	7	7	7	8	9	10	10
Hedge funds	49	62	69	69	73	71	73	74
Total real estate CIS	7	5	5	5	4	4	4	4
Real estate mutual funds	3	2	2	2	2	2	2	2
Real estate investment companies	4	3	3	3	2	2	2	2
Total foreign CIS marketed in Spain	1,024	1,033	1,048	1,048	1,046	1,058	1,068	1,072
Foreign funds marketed in Spain	429	399	407	407	421	423	424	417
Foreign companies marketed in Spain	595	634	641	641	625	635	644	655
Management companies	119	123	123	123	122	125	124	124
CIS depositories	37	36	35	35	35	34	33	33

1 Available data: November 2021.

Number of CIS investors and shareholders

TABLE 3.2

				2020	2021			
	2018	2019	2020	IV	I	II	III	IV[1]
Total financial CIS[2]	11,627,118	12,132,581	13,015,104	13,015,104	13,932,921	14,666,536	15,121,845	15,261,195
Mutual funds	11,213,482	11,734,029	12,654,439	12,654,439	13,581,009	14,319,397	14,777,155	14,918,883
Investment companies	413,636	398,552	360,665	360,665	351,912	347,139	344,690	342,312
Total real estate CIS[2]	905	799	798	798	690	688	690	690
Real estate mutual funds	483	483	483	483	483	483	482	482
Real estate investment companies	422	316	315	315	207	205	208	208
Total foreign CIS marketed in Spain[3]	3,172,682	3,361,901	4,312,340	4,312,340	4,865,192	5,231,449	5,609,293	–
Foreign funds marketed in Spain	547,517	521,648	592,053	592,053	635,555	697,470	723,358	–
Foreign companies marketed in Spain	2,625,165	2,840,253	3,720,287	3,720,287	4,229,637	4,533,979	4,885,935	–

1 Available data: October 2021.
2 Investors and shareholders who invest in many sub-funds from the same CIS have been taken into account once. For this reason, investors and shareholders may be different from those in Tables 3.6 and 3.7.
3 Only data on UCITs are included. From I-2018 onwards, data are estimated.

a Information about mutual funds and Investment companies contained in this section does not include hedge funds or funds of hedge funds. The information about hedge funds and funds of hedge funds is included in Table 3.12.

CIS total net assets

TABLE 3.3

Millions of euros

	2018	2019	2020	2020 IV	2021 I	II	III	IV[1]
Total financial CIS	286,930.9	308,170.1	306,654.5	306,654.5	320,524.3	337,338.4	343,722.2	349,906.5
Mutual funds[2]	259,095.0	279,377.4	279,694.5	279,694.5	292,865.2	309,047.2	315,632.6	321,324.6
Investment companies	27,835.9	28,792.7	26,960.0	26,960.0	27,659.1	28,291.2	28,089.6	28,582.0
Total real estate CIS	1,058.2	1,072.9	1,218.0	1,218.0	1,201.0	1,201.3	1,221.5	1,227.3
Real estate mutual funds	309.4	309.4	310.8	310.8	311.0	311.1	311.0	311.1
Real estate investment companies	748.8	763.5	907.1	907.1	890.0	890.2	910.5	916.3
Total foreign CIS marketed in Spain[3]	162,701.9	178,841.5	199,419.3	199,419.3	219,851.3	249,927.6	261,733.8	–
Foreign funds marketed in Spain	34,237.1	30,843.4	27,355.5	27,355.5	27,861.7	32,797.0	34,459.8	–
Foreign companies marketed in Spain	128,464.9	147,998.1	172,063.8	172,063.8	191,989.7	217,130.6	227,274.0	–

1 Available data: October 2021.
2 Mutual funds investment in financial mutual funds of the same management company reached €12,193.9 million in September 2021.
3 Only data on UCITs are included. From I-2018 onwards, data are estimated.

Asset allocation of mutual funds

TABLE 3.4

Millions of euros

	2018	2019	2020	2020 III	IV	2021 I	II	III
Asset	259,095.0	279,377.4	279,694.5	267,084.6	279,694.5	292,865.2	309,047.2	315,632.6
Portfolio investment	241,016.2	256,750.7	256,257.2	244,025.4	256,257.2	268,778.4	282,168.2	288,531.1
Domestic securities	74,486.1	66,520.4	54,587.8	53,561.9	54,587.8	54,198.1	55,270.4	56,360.1
Debt securities	50,537.5	44,637.7	38,394.5	38,418.7	38,394.5	37,044.9	34,519.9	34,914.9
Shares	10,868.4	9,047.9	6,185.3	5,283.9	6,185.3	6,584.2	6,863.3	6,833.9
Collective investment schemes	6,984.9	8,581.9	8,511.0	8,081.5	8,511.0	8,994.8	12,322.3	13,050.0
Deposits in credit institutions	5,854.8	4,004.8	1,341.5	1,645.0	1,341.5	1,370.0	1,364.6	1,349.0
Derivatives	235.4	243.2	140.9	120.7	140.9	190.3	177.1	174.8
Other	5.2	4.9	14.6	12.1	14.6	13.9	23.3	37.5
Foreign securities	166,522.5	190,224.5	201,664.8	190,459.0	201,664.8	214,574.7	226,894.2	232,167.3
Debt securities	74,079.1	83,817.5	86,151.5	86,819.1	86,151.5	89,938.7	92,596.8	92,917.5
Shares	26,660.8	33,115.9	33,886.1	30,293.6	33,886.1	36,866.7	41,191.2	42,944.2
Collective investment schemes	65,624.3	73,054.4	81,358.2	73,159.4	81,358.2	87,482.1	92,971.0	96,006.2
Deposits in credit institutions	21.1	4.5	0.1	9.7	0.1	0.0	0.0	0.0
Derivatives	136.0	231.3	268.0	176.4	268.0	286.4	121.4	282.9
Other	1.2	0.9	0.8	0.9	0.8	0.8	13.9	16.5
Doubtful assets and matured investments	7.6	5.8	4.6	4.5	4.6	5.6	3.6	3.8
Intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net fixed assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash	16,897.1	21,735.1	22,203.0	21,373.8	22,203.0	22,725.1	25,490.7	25,805.1
Net balance (Debtors - Creditors)	1,181.7	891.6	1,234.3	1,685.4	1,234.3	1,361.6	1,388.3	1,296.4

Asset allocation of investment companies

TABLE 3.5

Millions of euros

				2020		2021		
	2018	2019	2020	III	IV	I	II	III
Asset	27,835.9	28,792.7	26,960.0	26,074.7	26,960.0	27,659.1	28,291.2	28,089.6
Portfolio investment	24,840.8	25,940.3	24,548.9	23,439.5	24,548.9	25,088.5	25,598.8	25,317.6
Domestic securities	5,031.5	4,588.3	3,419.9	3,293.7	3,419.9	3,490.9	3,517.6	3,460.0
Debt securities	1,433.8	1,217.1	734.3	878.1	734.3	655.2	619.3	630.9
Shares	2,193.7	1,982.8	1,601.2	1,381.3	1,601.2	1,690.4	1,714.8	1,636.2
Collective investment schemes	1,193.8	1,232.2	967.7	921.8	967.7	1,039.0	1,089.2	1,092.5
Deposits in credit institutions	164.3	98.6	47.7	57.9	47.7	35.3	27.8	30.6
Derivatives	-0.2	0.8	3.2	-4.0	3.2	4.7	-0.6	1.4
Other	46.2	56.8	65.9	58.7	65.9	66.2	67.1	68.4
Foreign securities	19,803.8	21,348.2	21,125.7	20,142.4	21,125.7	21,594.6	22,078.8	21,855.4
Debt securities	4,241.6	4,617.7	3,243.8	3,860.2	3,243.8	2,909.1	2,852.4	2,822.6
Shares	5,979.1	6,133.8	6,548.1	5,915.0	6,548.1	6,940.2	7,150.3	6,943.3
Collective investment schemes	9,540.9	10,549.0	11,297.4	10,315.4	11,297.4	11,718.5	12,049.4	12,050.8
Deposits in credit institutions	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Derivatives	27.6	34.1	23.8	38.6	23.8	13.3	12.4	23.5
Other	14.5	12.5	12.6	13.1	12.6	13.5	14.4	15.2
Doubtful assets and matured investments	5.6	3.8	3.2	3.4	3.2	3.0	2.4	2.2
Intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net fixed assets	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Cash	2,731.9	2,659.8	2,219.3	2,404.0	2,219.3	2,387.9	2,541.8	2,517.3
Net balance (Debtors - Creditors)	262.6	192.1	191.4	230.6	191.4	182.1	150.0	254.2

Financial mutual funds: number, investors and total net assets by category[1, 2]

TABLE 3.6

	2018	2019	2020	2020 IV	2021 I	II	III	IV[3]
NO. OF FUNDS								
Total financial mutual funds	1,725	1,710	1,644	1,644	1,642	1,629	1,604	1,616
Fixed income[4]	279	281	276	276	279	272	265	266
Mixed fixed income[5]	168	173	174	174	181	182	183	184
Mixed equity[6]	184	185	186	186	188	186	187	188
Euro equity	113	113	104	104	100	98	96	97
Foreign equity	236	263	276	276	278	285	295	298
Guaranteed fixed income	67	66	55	55	53	51	50	50
Guaranteed equity[7]	163	155	133	133	130	125	117	117
Global funds	242	255	248	248	252	253	252	257
Passive management[8]	172	133	118	118	114	110	93	93
Absolute return	99	84	72	72	65	65	64	64
INVESTORS								
Total financial mutual funds	11,217,569	11,739,183	12,660,100	12,660,100	13,586,390	14,325,481	14,783,710	14,925,487
Fixed income[4]	2,709,547	3,668,324	4,135,294	4,135,294	4,435,899	4,621,057	4,766,153	4,817,994
Mixed fixed income[5]	1,188,157	1,087,881	1,203,280	1,203,280	1,364,227	1,406,147	1,411,225	1,425,562
Mixed equity[6]	624,290	707,159	745,112	745,112	806,042	648,612	681,278	686,931
Euro equity	831,115	598,901	530,107	530,107	705,654	737,047	774,026	757,803
Foreign equity	2,225,366	2,655,123	3,043,542	3,043,542	3,298,703	3,545,847	3,671,230	3,729,028
Guaranteed fixed income	165,913	154,980	135,320	135,320	127,437	115,807	109,449	103,965
Guaranteed equity[7]	494,660	428,470	356,439	356,439	348,061	308,880	273,878	270,171
Global funds	1,501,730	1,359,915	1,409,759	1,409,759	1,506,594	1,920,588	2,046,838	2,075,116
Passive management[8]	543,192	429,428	511,251	511,251	513,333	530,215	522,529	524,497
Absolute return	930,641	646,042	587,040	587,040	477,482	488,319	524,138	531,456
TOTAL NET ASSETS (millions of euros)								
Total financial mutual funds	259,095.0	279,377.4	279,694.5	279,694.5	292,865.2	309,047.2	315,632.6	321,324.6
Fixed income[4]	66,889.3	78,583.2	81,015.9	81,015.9	82,209.7	83,503.3	86,173.0	85,883.0
Mixed fixed income[5]	40,471.0	40,819.9	43,200.4	43,200.4	48,373.9	48,143.1	48,904.9	49,896.4
Mixed equity[6]	23,256.0	28,775.8	30,432.7	30,432.7	32,601.3	24,893.5	25,970.6	26,826.0
Euro equity	12,177.7	10,145.1	7,091.1	7,091.1	7,771.9	8,232.2	8,180.2	8,397.6
Foreign equity	24,404.9	34,078.9	37,722.5	37,722.5	42,746.1	46,464.6	47,217.0	49,598.5
Guaranteed fixed income	4,887.4	4,809.3	4,177.0	4,177.0	3,929.5	3,585.6	3,356.7	3,165.3
Guaranteed equity[7]	14,556.0	13,229.1	11,037.1	11,037.1	10,745.2	9,339.3	8,394.1	8,264.6
Global funds	42,137.2	43,041.9	40,944.5	40,944.5	43,120.7	62,913.0	67,783.8	69,494.7
Passive management[8]	16,138.6	14,073.8	14,014.3	14,014.3	13,571.5	13,587.1	13,137.3	13,202.2
Absolute return	14,172.5	11,818.3	10,057.4	10,057.4	7,793.7	8,383.9	6,513.4	6,594.7

1 Sub-funds which have sent reports to the CNMV excluding those in process of dissolution or liquidation.
2 Data on side-pocket sub-funds are only included in aggregate figures, and not in each individual category.
3 Available data: October 2021.
4 Until I-2019 includes: Fixed income euro, Foreign fixed income, Monetary market funds and Short-term monetary market funds. From II-2019 onwards it includes: short-term euro fixed income, euro fixed income, foreign fixed income, public debt constant net asset value short-term money market funds (MMFs), low volatility net asset value short-term MMFs, variable net asset value short-term MMFs and variable net asset value standard MMFs.
5 Mixed euro fixed income and foreign mixed fixed income.
6 Mixed euro equity and foreign mixed equity.
7 Guaranteed equity and partial guarantee.
8 Until I-2019 it includes: passive management CIS. From II-2019 onwards it includes: passive management CIS, index-tracking CIS and non-guaranteed specific return target CIS.

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

TABLE 3.7

	2018	2019	2020	2020 IV	2021 I	II	III	IV[1]
INVESTORS								
Total financial mutual funds	11,217,569	11,739,183	12,660,100	12,660,100	13,586,390	14,325,481	14,783,710	14,925,487
Natural persons	11,008,977	11,534,957	12,437,954	12,437,954	13,346,642	14,068,930	14,518,217	14,656,714
Residents	10,917,387	11,440,086	12,339,829	12,339,829	13,245,856	13,964,805	14,408,799	14,546,604
Non-residents	91,590	94,871	98,125	98,125	100,786	104,125	109,418	110,110
Legal persons	208,592	204,226	222,146	222,146	239,748	256,551	265,493	268,773
Credit institutions	655	1,928	1,403	1,403	1,479	1,465	1,483	1,522.00
Other resident institutions	207,073	201,408	219,849	219,849	237,336	254,112	262,995	266,226
Non-resident institutions	864	890	894	894	933	974	1,015	1,025
TOTAL NET ASSETS (millions of euros)								
Total financial mutual funds	259,095.0	279,377.4	279,694.5	279,694.5	292,865.2	309,047.2	315,632.6	321,324.6
Natural persons	215,785.0	231,434.8	230,573.8	230,573.8	240,434.7	250,264.3	255,030.4	259,193.8
Residents	212,758.3	228,214.4	227,444.5	227,444.5	237,165.7	246,838.9	251,485.0	255,597.7
Non-residents	3,026.7	3,220.4	3,129.3	3,129.3	3,269.0	3,425.4	3,545.4	3,596.1
Legal persons	43,310.0	47,942.6	49,120.7	49,120.7	52,430.5	58,782.9	60,602.2	62,130.8
Credit institutions	384.1	523.7	480.0	480.0	531.3	513.2	482.8	526.9
Other resident institutions	41,967.9	46,628.9	47,995.2	47,995.2	51,233.9	57,559.6	59,358.6	60,820.2
Non-resident institutions	957.9	790.0	645.4	645.4	665.4	710.1	760.8	783.6

1 Available data: October 2021.

Subscriptions and redemptions of financial mutual funds by category[1, 2]

TABLE 3.8

Millions of euros

	2018	2019	2020	2020 III	IV	2021 I	II	III
SUBSCRIPTIONS								
Total financial mutual funds	130,577.0	156,702.7	113,265.7	22,788.8	27,903.2	35,042.4	51,735.6	27,554.9
Fixed income	53,165.8	91,050.8	51,487.7	10,912.9	12,703.3	13,896.5	16,922.1	11,740.5
Mixed fixed income	14,823.4	14,154.1	15,496.2	3,347.8	3,179.3	6,104.1	6,481.4	3,653.1
Mixed equity	10,406.8	11,156.0	8,861.2	2,385.2	2,077.5	2,962.5	3,042.2	2,078.5
Euro equity	7,024.3	2,998.4	2,232.1	252.2	600.2	1,008.8	976.7	467.4
Foreign equity	13,265.2	16,864.0	15,974.8	2,584.2	3,982.7	5,194.4	5,883.0	3,526.1
Guaranteed fixed income	796.0	854.1	424.7	173.0	1.4	2.2	4.7	0.7
Guaranteed equity	2,116.8	898.2	74.2	24.7	25.2	33.1	30.5	11.7
Global funds	20,455.3	12,713.7	11,391.1	1,646.2	3,371.2	3,655.2	16,386.3	5,197.2
Passive management	3,014.3	2,261.9	4,944.6	1,015.1	1,460.4	1,062.9	936.6	374.8
Absolute return	5,493.3	3,751.5	2,379.0	447.5	501.9	1,122.6	1,072.2	505.1
REDEMPTIONS								
Total financial mutual funds	122,669.5	154,273.0	112,634.4	22,129.0	25,979.4	28,035.7	41,143.4	21,214.5
Fixed income	55,823.7	80,046.4	47,611.0	8,611.4	11,016.6	12,562.8	14,936.3	9,133.2
Mixed fixed income	16,685.2	16,004.2	14,974.6	4,517.1	3,051.5	4,025.5	3,710.1	2,972.4
Mixed equity	7,344.0	7,943.7	7,667.5	1,566.0	1,996.7	1,794.9	10,262.5	979.20
Euro equity	5,246.8	6,540.2	4,205.3	711.5	919.3	925.8	838.3	546.2
Foreign equity	9,476.0	12,963.1	13,449.4	2,471.0	2,906.0	3,120.1	4,393.9	2,974.9
Guaranteed fixed income	1,202.9	1,136.7	1,030.6	272.5	247.4	153.7	340.1	229.5
Guaranteed equity	2,582.6	2,739.2	2,245.2	350.5	370.0	332.7	1,437.3	832.6
Global funds	11,301.6	15,133.7	12,743.7	2,227.3	3,487.6	2,750.3	3,400.7	2,404.0
Passive management	5,776.3	5,272.0	4,985.6	930.7	1,210.0	776.1	1,231.4	869.4
Absolute return	7,230.5	6,493.7	3,721.4	471.0	774.2	1,594.0	592.8	273.1

1 Estimated data.
2 Data on side-pocket sub-funds are only included in aggregate figures, and not in each individual category.

Change in assets in financial mutual funds by category: Net subscriptions/redemptions and return on assets[1, 2]

TABLE 3.9

Millions of euros

				2020		2021		
	2018	2019	2020	III	IV	I	II	III
NET SUBSCRIPTIONS/REDEMPTIONS								
Total financial mutual funds	7,841.8	2,467.5	660.3	680.6	1,938.1	7,009.8	10,633.7	6,337.3
Fixed income	-2,766.0	10,732.6	2,062.6	2,141.4	1,714.0	1,324.9	1,237.0	2,632.1
Mixed fixed income	-1,063.7	-1,506.1	2,619.5	-988.9	219.6	4,789.7	-705.8	761.9
Mixed equity	2,485.9	3,288.8	1,601.4	1,036.4	147.0	1,375.3	-8,279.2	1,091.9
Euro equity	1,848.7	-3,588.2	-2,007.7	-485.7	-319.2	82.3	135.8	-88.8
Foreign equity	3,864.1	4,113.8	2,633.1	174.0	1,078.9	2,082.0	1,257.6	600.9
Guaranteed fixed income	-575.8	-282.6	-707.4	-156.9	-245.4	-226.2	-335.5	-228.7
Guaranteed equity	-667.2	-1,857.0	-2,254.2	-347.2	-380.2	-299.6	-1,406.6	-943.3
Global funds	9,448.9	-2,553.9	-1,501.2	-580.3	-92.7	1,075.3	18,527.0	4,878.0
Passive management	-2,790.4	-3,026.8	-23.8	158.5	179.9	-862.2	-294.8	-500.6
Absolute return	-1,899.6	-2,852.9	-1,761.9	-270.7	-363.5	-2,331.7	498.4	-1,866.2
RETURN ON ASSETS								
Total financial mutual funds	-13,919.3	18,002.8	-310.6	2,796.2	10,679.0	6,169.7	5,558.4	260.2
Fixed income	-908.5	961.9	371.5	455.6	525.9	-130.6	56.8	38.4
Mixed fixed income	-1,865.1	1,866.9	-220.0	369.4	1,029.4	389.1	481.2	5.4
Mixed equity	-1,616.6	2,231.0	55.5	471.1	1,266.6	793.7	572.3	-14.1
Euro equity	-1,871.2	1,556.4	-1,044.9	-142.5	1,011.8	598.9	325.1	37.3
Foreign equity	-3,522.6	5,561.1	1,012.7	832.6	3,881.1	2,941.7	2,462.1	151.6
Guaranteed fixed income	6.6	204.4	75.2	37.1	24.8	-21.4	-8.5	-0.1
Guaranteed equity	-194.2	530.0	62.2	48.7	89.3	7.8	0.6	-1.9
Global funds	-2,602.1	3,460.8	-595.3	566.4	1,980.3	1,101.2	1,265.6	-7.1
Passive management	-537.5	1,133.2	-28.7	15.2	610.6	421.4	310.4	55.0
Absolute return	-796.6	498.7	1.7	142.7	259.3	68.0	92.6	-4.3

1 Data on side-pocket sub-funds are only included in aggregate figures, and not in each individual category.
2 A change of category is treated as a redemption in the original category and a subscription in the final one. For this reason, and the adjustments due to de-registrations in the quarter, the net subscription/refund data may be different from those in Table 3.8

Return on assets in financial mutual funds. Breakdown by category[1]

TABLE 3.10

% of daily average total net assets

				2020		2021		
	2018	2019	2020	III	IV	I	II	III
MANAGEMENT YIELDS								
Total financial mutual funds	-4.19	7.67	0.85	1.31	4.18	2.41	2.14	0.36
Fixed income	-0.79	1.83	0.99	0.72	0.79	-0.04	0.19	0.16
Mixed fixed income	-3.25	5.75	0.50	1.15	2.70	1.06	1.31	0.23
Mixed equity	-5.46	9.79	1.60	1.99	4.64	2.89	2.79	0.26
Euro equity	-11.98	16.01	-12.72	-1.71	15.60	8.62	4.46	0.81
Foreign equity	-11.89	21.00	4.76	3.01	11.53	7.73	5.97	0.85
Guaranteed fixed income	0.56	4.52	2.18	1.04	0.70	-0.43	-0.12	0.10
Guaranteed equity	-0.80	4.20	1.00	0.56	0.90	0.19	0.09	0.11
Global funds	-5.11	9.24	-0.30	1.74	5.29	2.93	2.58	0.40
Passive management	-2.55	7.88	0.29	0.27	4.61	3.31	2.43	0.53
Absolute return	-4.01	4.93	0.87	1.61	2.81	1.14	1.38	0.08
EXPENSES. MANAGEMENT FEE								
Total financial mutual funds	0.86	0.85	0.83	0.21	0.22	0.21	0.22	0.21
Fixed income	0.45	0.44	0.42	0.11	0.11	0.10	0.10	0.10
Mixed fixed income	0.96	0.92	0.88	0.22	0.23	0.22	0.22	0.21
Mixed equity	1.26	1.29	1.28	0.32	0.34	0.34	0.32	0.29
Euro equity	1.47	1.49	1.45	0.37	0.37	0.33	0.33	0.32
Foreign equity	1.41	1.41	1.31	0.32	0.36	0.34	0.33	0.30
Guaranteed fixed income	0.38	0.36	0.36	0.09	0.09	0.09	0.09	0.09
Guaranteed equity	0.53	0.47	0.44	0.11	0.11	0.11	0.11	0.11
Global funds	0.98	1.03	1.07	0.27	0.27	0.28	0.30	0.28
Passive management	0.48	0.42	0.41	0.11	0.09	0.10	0.09	0.09
Absolute return	0.79	0.81	0.78	0.19	0.20	0.20	0.19	0.14
EXPENSES. DEPOSITORY FEE								
Total financial mutual funds	0.07	0.07	0.08	0.02	0.02	0.02	0.02	0.02
Fixed income	0.06	0.06	0.06	0.02	0.02	0.02	0.02	0.01
Mixed fixed income	0.08	0.08	0.08	0.02	0.02	0.02	0.02	0.02
Mixed equity	0.10	0.10	0.10	0.02	0.02	0.02	0.02	0.02
Euro equity	0.10	0.10	0.10	0.02	0.02	0.02	0.02	0.02
Foreign equity	0.09	0.09	0.09	0.02	0.02	0.02	0.02	0.02
Guaranteed fixed income	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.01
Guaranteed equity	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.01
Global funds	0.08	0.08	0.08	0.02	0.02	0.02	0.02	0.02
Passive management	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.01
Absolute return	0.06	0.06	0.07	0.02	0.02	0.02	0.02	0.01

1 Data on side-pocket sub-funds are only included in aggregate figures, and not in each individual category.

Mutual funds, quarterly returns. Breakdown by category[1]

TABLE 3.11

In %

				2020	2021			
	2018	2019	2020	IV	I	II	III	IV[2]
Total financial mutual funds	-4.89	7.12	0.78	4.14	2.34	1.93	0.10	1.14
Fixed income	-1.44	1.38	0.62	0.68	-0.16	0.07	0.05	-0.29
Mixed fixed income	-4.27	4.75	-0.03	2.45	0.85	1.04	0.02	0.31
Mixed equity	-6.45	9.25	0.59	4.37	2.56	2.42	-0.03	1.47
Euro equity	-13.01	14.27	-8.75	16.61	8.58	4.28	0.42	3.04
Foreign equity	-12.34	22.18	2.83	11.94	7.87	5.74	0.42	4.02
Guaranteed fixed income	0.09	3.98	1.68	0.59	-0.52	-0.22	-0.02	-0.58
Guaranteed equity	-1.33	3.62	0.70	0.81	0.08	0.00	-0.03	-0.13
Global funds	-5.69	8.45	-0.31	5.18	3.10	2.28	0.01	1.24
Passive management	-3.16	7.45	0.44	4.82	3.28	2.36	0.40	2.21
Absolute return	-4.81	3.94	0.94	2.80	0.97	1.15	-0.07	0.54

1 Data on side-pocket sub-funds are only included in aggregate figures, and not in each individual category.
2 Available data: October 2021.

Hedge funds and funds of hedge funds

TABLE 3.12

				2020		2021		
	2018	2019	2020	III	IV	I	II	III[1]
HEDGE FUNDS								
Investors/shareholders[2]	4,444	7,548	7,961	7,968	7,961	8,067	8,299	8,439
Total net assets (millions of euros)	2,262.2	2,832.4	2,912.6	2,695.2	2,912.6	3,085.3	3,273.0	3,334.5
Subscriptions (millions of euros)	500.7	1,290.0	454.5	42.7	125.6	134.4	245.6	79.0
Redemptions (millions of euros)	320.4	937.0	407.2	119.6	120.5	62.5	157.1	31.1
Net subscriptions/redemptions (millions of euros)	180.3	353.0	47.3	-77.0	5.1	71.9	88.5	47.8
Return on assets (millions of euros)	-153.8	217.2	27.7	62.5	212.3	100.8	98.9	13.2
Returns (%)	-6.47	10.35	1.77	1.63	7.66	2.77	3.36	0.38
Management yields (%)[3]	-5.46	9.94	2.35	2.80	7.93	3.77	3.76	0.55
Management fees (%)[3]	1.70	1.19	1.43	0.44	0.53	0.29	0.58	0.17
Financial expenses (%)[3]	0.01	0.00	0.02	0.00	0.02	0.04	0.03	0.02
FUNDS OF HEDGE FUNDS								
Investors/shareholders[2]	2,804	2,859	2,858	2,865	2,858	3,020	3,848	3,844
Total net assets (millions of euros)	468.8	566.7	652.8	622.0	652.8	666.0	727.3	728.5
Subscriptions (millions of euros)	7.2	72.3	32.4	0.0	18.1	4.6	45.9	–
Redemptions (millions of euros)	0.6	0.3	3.1	0.0	2.6	11.7	0.2	–
Net subscriptions/redemptions (millions of euros)	6.6	71.4	29.3	0.0	15.5	-7.1	45.7	–
Return on assets (millions of euros)	-6.5	26.5	56.8	9.7	15.3	20.3	15.6	–
Returns (%)	-1.28	5.23	3.71	1.59	2.44	3.22	2.18	0.39
Management yields (%)[4]	-3.04	6.32	4.24	1.75	2.55	3.35	2.49	–
Management fees (%)[4]	1.64	1.63	1.39	0.34	0.34	0.33	0.34	–
Depository fees (%)[4]	0.06	0.06	0.06	0.01	0.02	0.01	0.01	–

1 Available data: August 2021.
2 Data on sub-funds.
3 % of monthly average total net assets.
4 % of daily average total net assets.

Management companies. Number of portfolios and assets under management

TABLE 3.13

				2020	2021			
	2018	2019	2020	IV	I	II	III	IV[1]
NUMBER OF PORTFOLIOS[2]								
Mutual funds	1,617	1,595	1,515	1,515	1,506	1,487	1,469	1,459
Investment companies	2,713	2,560	2,421	2,421	2,377	2,328	2,301	2,292
Funds of hedge funds	7	7	7	7	8	9	10	10
Hedge funds	49	62	69	69	73	71	72	72
Real estate mutual funds	3	2	2	2	2	2	2	2
Real estate investment companies	4	3	3	3	2	2	2	2
ASSETS UNDER MANAGEMENT (millions of euros)								
Mutual funds	259,095.0	279,377.4	279,694.5	279,694.5	292,865.2	309,047.2	315,632.6	321,324.6
Investment companies	27,479.7	28,385.5	26,564.8	26,564.8	27,245.8	27,827.0	27,625.4	28,106.2
Funds of hedge funds[3]	468.8	566.7	652.8	652.8	666.0	727.3	725.2	–
Hedge funds[3]	2,262.2	2,832.4	2,912.6	2,912.6	3,085.3	3,273.0	3,267.4	–
Real estate mutual funds	309.4	309.4	310.8	310.8	311.0	311.1	311.0	311.1
Real estate investment companies	748.8	763.5	907.1	907.1	890.0	890.2	910.5	916.3

2 Available data: October 2021.
2 Data source: Registers of Collective Investment Schemes.
3 Available data for III-2021: July 2021.

Foreign Collective Investment Schemes marketed in Spain[1]

TABLE 3.14

	2018	2019	2020	2020		2021		
				III	IV	I	II	III
INVESTMENT VOLUME[2, 3] (millions of euros)								
Total	162,335.0	178,841.5	199,419.3	190,324.3	199,419.3	219,851.3	249,927.6	261,733.8
Mutual funds	34,209.6	30,843.4	27,355.5	26,815.7	27,355.5	27,861.7	32,797.0	34,459.8
Investment companies	128,125.5	147,998.1	172,063.8	163,508.6	172,063.8	191,989.7	217,130.6	227,274.0
INVESTORS/SHAREHOLDERS[2]								
Total	3,173,245	3,361,901	4,312,340	3,939,998	4,312,340	4,865,192	5,231,449	5,609,293
Mutual funds	547,826	521,648	592,053	568,132	592,053	635,555	697,470	723,358
Investment companies	2,625,419	2,840,253	3,720,287	3,371,866	3,720,287	4,229,637	4,533,979	4,885,935
NUMBER OF SCHEMES[4]								
Total	1,024	1,033	1,048	1,042	1,048	1,046	1,058	1,068
Mutual funds	429	399	407	404	407	421	423	424
Investment companies	595	634	641	638	641	625	635	644
COUNTRY[4]								
Luxembourg	447	462	472	468	472	480	486	493
France	263	222	225	224	225	228	229	228
Ireland	200	220	222	221	222	221	224	225
Germany	42	48	45	46	45	48	50	50
United Kingdom	27	23	23	23	23	0	0	0
The Netherlands	2	4	3	4	3	3	3	3
Austria	24	30	32	31	32	34	34	33
Belgium	5	5	5	5	5	5	5	5
Denmark	1	1	1	1	1	1	1	1
Finland	9	11	13	12	13	14	14	14
Liechtenstein	4	4	4	4	4	4	4	4
Portugal	0	3	3	3	3	3	3	3
Sweden	0	0	0	0	0	5	5	9

1 Only data on UCITs are included.
2 From I-2018 onwards, data are estimated.
3 Investment volume: participations or shares owned by the investors/shareholders at the end of the period valued at that time.
4 UCITS (funds and societies) registered at the CNMV.

Real estate investment schemes[1]

TABLE 3.15

	2018	2019	2020	2020	2021			
				IV	I	II	III	IV[2]
REAL ESTATE MUTUAL FUNDS								
Number	2	2	2	2	2	2	2	2
Investors	483	483	483	483	483	483	482	482
Assets (millions of euros)	309.4	309.4	310.8	310.8	311.0	311.1	311.0	311.1
Return on assets (%)	0.24	-0.02	0.47	0.06	0.06	0.01	-0.01	0.01
REAL ESTATE INVESTMENT COMPANIES								
Number	4	3	3	3	2	2	2	2
Shareholders	422	316	315	315	207	205	208	208
Assets (millions of euros)	748.8	763.5	907.1	907.1	890.0	890.2	910.5	916.3

1 Real estate investment schemes which have sent reports to the CNMV, excluding those in process of dissolution or liquidation.
2 Available data: October 2021.